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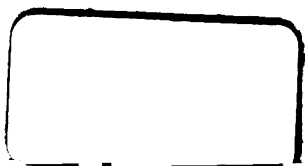
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(alm) 201224 ε.23



THE
BRISTOL CHANNEL
ALMANACK
AND
TIDE TABLES,
TOGETHER WITH
PORT CHARGES,
PILOTAGE REGULATIONS,
&c., &c.,
FOR THE YEAR
1862.

LONDON:
SIMPKIN, MARSHALL & CO., STATIONERS' HALL COURT.
SWANSEA:
PEARSE & BROWN, NAUTICAL BOOKSELLERS, 22, WIND STREET.
PRICE ONE SHILLING.

TO THE PUBLIC.

THE Publishers of the Bristol Channel Tide Tables and Almanack, in presenting the first year's edition to the Public, beg to say that they have collected the particulars of Port Charges, &c. with as much care as circumstances would permit, but should any errors or omissions be discovered, they will be glad to have them pointed out that they may be corrected in future years; and any suggestions for the improvement of the work will also be gladly received, as it is their desire to make it in every respect as accurate and complete as possible.

Swansea, Nov., 1861.

EXPLANATION.

THE TIDES in this work are calculated for GREENWICH MEAN TIME, and the height for that Tide nearest mid-day at the following places:—

BARNSTAPLE.—The Bar.

BRIDGWATER.—The Bridge. The time of high water at Bridgwater Bar is about 40 minutes earlier. The depth of water at Cumbwitch Pill is 7 to 8 feet more than in the Tables.

BRISTOL.—Cumberland Gates. These Tides are Mr. Bunt's calculations reduced to Greenwich Time, and the heights are the mean average of the two Tides for the day. The height at Bathurst Gates is 9 feet 2 inches less than in the Tables.

CARDIFF.—West Dock Sill. At the East Dock, the depth is 3 feet more than in the Tables.

GLOUCESTER.—Entrance to the Canal at Sharpness Point.

ILFRACOMBE.—Pier Head.

LLANELLY.—Dock Gates. At Burry Bar the depth of water is 8 feet more than in the Tables.

NEWPORT.—Dock Gates, which are about 40 feet above the bed of the river.

PEMBROKE DOCK.—The heights are the rise above low water at spring tides. The time at St. Ann's Lighthouse, is about 25 minutes earlier.

SWANSEA.—Lock Sill of North Docks. The depth of water in the Entrance Channel, is about 2 feet, and at Hafod Works, 7 feet 6 inches less than in the Tables.

The times of high water for London and Liverpool, also the Moon's Transit and Equation of Time are added for the convenience of mariners.

PHASES OF THE MOON.

First Quarter. 7th, 10h. 47m. p.m. | Last Quarter.. 23rd, 6h. 37m. a.m.
 Full Moon .. 16th, 1h. 55m. a.m. | New Moon .. 30th, 2h. 49m. a.m.

M. D.	WEEK DAYS.	Equation of Time.	Moon's Trans- it.	London.		Liverpool.		Barnstaple.			
				Morn.	Even.	Morn.	Even.	Morn.	Even.	Height	
		M. S.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	F.	I.
1	Wednes	3 52	0a58	2 11	2 37	11 47	..	6 0	6 26	27	6
2	Thurs..	4 20	1 52	3 2	3 25	0 11	0 35	6 48	7 10	27	7
3	Friday..	4 48	2 42	3 48	4 10	0 58	1 18	7 30	7 51	27	6
4	Satur..	5 16	3 29	4 30	4 50	1 38	1 59	8 11	8 31	26	10
5	Sunday	5 43	4 13	5 12	5 32	2 19	2 38	8 50	9 7	25	11
6	Mon ..	6 9	4 56	5 52	6 12	2 57	3 14	9 25	9 43	24	11
7	Tues ..	6 35	5 38	6 30	6 50	3 33	3 54	10 0	10 19	23	9
8	Wednes	7 1	6 22	7 11	7 32	4 15	4 39	10 41	11 0	22	3
9	Thurs..	7 26	7 6	7 56	8 26	5 10	5 44	11 29	11 58	21	4
10	Friday..	7 51	7 53	9 1	9 36	6 24	7 2	..	0 38	21	0
11	Satur..	8 14	8 41	10 12	10 48	7 38	8 13	1 18	2 0	21	4
12	Sunday	8 38	9 31	11 25	..	8 47	9 18	2 42	3 12	22	3
13	Mon ..	9 0	10 23	12 0	0 32	9 42	10 2	3 41	4 6	23	5
14	Tues ..	9 22	11 14	0 57	1 18	10 23	10 42	4 31	4 54	24	7
15	Wednes	9 44	morn.	1 40	2 0	11 3	11 23	5 17	5 35	25	6
16	Thurs..	10 4	0 5	2 19	2 39	11 43	12 0	5 53	6 12	26	0
17	Friday..	10 24	0 54	2 58	3 15	..	0 19	6 32	6 48	26	8
18	Satur..	10 44	1 42	3 33	3 50	0 37	0 55	7 6	7 24	27	2
19	Sunday	11 2	2 29	4 7	4 26	1 14	1 32	7 43	8 2	27	0
20	Mon ..	11 20	3 16	4 44	5 2	1 50	2 8	8 20	8 39	26	10
21	Tues ..	11 37	4 4	5 21	5 41	2 28	2 45	9 0	9 19	26	6
22	Wednes	11 53	4 53	5 59	6 21	3 5	3 28	9 38	10 0	25	9
23	Thurs..	12 9	5 46	6 44	7 7	3 50	4 16	10 24	10 50	24	6
24	Friday..	12 24	6 41	7 33	8 4	4 48	5 22	11 14	11 52	23	0
25	Satur..	12 38	7 40	8 38	9 20	6 5	6 53	..	0 27	22	5
26	Sunday	12 51	8 41	10 3	10 47	7 37	8 20	1 16	2 6	23	2
27	Mon ..	13 3	9 42	11 32	..	8 59	9 30	2 47	3 29	24	3
28	Tues ..	13 15	10 42	0 12	0 44	9 58	10 24	4 0	4 31	25	9
29	Wednes	13 26	11 38	1 14	1 41	10 50	11 13	5 4	5 26	27	1
30	Thurs..	13 36	0a30	2 7	2 29	11 35	11 58	5 47	6 9	27	9
31	Friday..	13 45	1 19	2 51	3 13	..	0 18	6 31	6 54	27	11

The above are in Greenwich Time, if local Mean Time be required for
 Liverpool, *sub.* 12m.—Barnstaple, *sub.* 17m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 7th, 10h. 47m. p.m. | Last Quarter.. 23rd, 6h. 37m. a.m.
 Full Moon .. 16th, 1h. 55m. a.m. | New Moon .. 30th, 2h. 49m. a.m.

M. D.	WEEK DAYS.	Bridgwater.				Bristol.				Cardiff.			
		Morn.	Even.	Height		Morn.	Even.	Height		Morn.	Even.	Height	
		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.	
1	Wednesday	7 48	8 14	15 5		7 39	8 4	30 2		7 18	7 44	27 3	
2	Thursday.	8 36	8 56	15 6		8 27	8 47	30 5		8 6	8 26	27 8	
3	Friday ..	9 18	9 35	15 5		9 7	9 26	30 0		8 48	9 5	27 6	
4	Saturday..	9 53	10 11	14 7		9 45	10 2	28 10		9 23	9 41	26 6	
5	Sunday ..	10 30	10 46	13 5		10 20	10 37	27 2		10 0	10 16	25 0	
6	Monday..	11 5	11 20	12 2		10 55	11 11	25 1		10 35	10 50	23 6	
7	Tuesday..	11 38	11 54	10 9		11 29	11 44	22 9		11 8	11 24	21 0	
8	Wednesday	..	0 15	8 10		..	0 6	20 9		11 45	..	19 2	
9	Thursday.	0 33	1 6	7 7		0 23	0 56	19 3		0 8	0 36	17 7	
10	Friday ..	1 35	2 19	7 2		1 25	2 9	17 11		1 5	1 50	17 6	
11	Saturday..	2 54	3 42	7 7		2 44	3 32	18 5		2 23	3 12	17 10	
12	Sunday ..	4 13	4 53	8 10		4 3	4 43	20 1		3 44	4 10	18 7	
13	Monday..	5 16	5 49	10 4		5 6	5 39	22 3		4 46	5 17	20 6	
14	Tuesday..	6 6	6 35	11 9		5 56	6 25	24 4		5 32	6 8	22 6	
15	Wednesday	6 52	7 18	12 11		6 42	7 8	26 3		6 24	6 50	23 4	
16	Thursday.	7 33	7 54	13 6		7 23	7 44	27 8		7 5	7 23	24 7	
17	Friday ..	8 14	8 34	14 4		8 4	8 24	28 8		7 45	8 6	26 0	
18	Saturday..	8 51	9 10	14 9		8 41	9 0	29 3		8 22	8 41	26 7	
19	Sunday ..	9 24	9 48	15 1		9 14	9 38	29 2		8 54	9 14	26 6	
20	Monday..	10 0	10 24	15 1		9 50	10 14	28 8		9 30	9 54	26 3	
21	Tuesday..	10 39	11 1	14 2		10 29	10 51	27 8		10 9	10 34	26 0	
22	Wednesday	11 20	11 42	13 3		11 10	11 32	26 0		10 50	11 12	24 9	
23	Thursday.	..	0 5	11 8		11 55	..	24 3		11 35	..	22 8	
24	Friday ..	0 34	1 3	9 9		0 24	0 53	22 6		0 6	0 32	20 4	
25	Saturday..	1 41	2 18	9 1		1 31	2 8	20 10		1 10	1 50	19 3	
26	Sunday ..	3 3	3 46	10 0		2 53	3 36	21 4		2 32	3 18	20 7	
27	Monday..	4 34	5 9	11 4		4 24	4 59	23 10		4 5	4 37	21 10	
28	Tuesday..	5 46	6 17	13 3		5 36	6 7	26 4		5 16	5 47	24 4	
29	Wednesday	6 47	7 14	14 11		6 37	7 4	28 5		6 13	6 45	25 5	
30	Thursday.	7 39	8 0	15 4		7 29	7 50	30 1		7 8	7 32	27 0	
31	Friday ..	8 21	8 40	15 11		8 11	8 30	31 0		7 50	8 11	27 9	

The above are in Greenwich Time, if local Mean Time be required for
 Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.—Cardiff, *sub.* 13m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 7th, 10h. 47m. p.m. | Last Quarter. 23rd, 6h. 37m. a.m.
 Full Moon .. 16th, 1h. 55m. a.m. | New Moon .. 30th, 2h. 49m. a.m.

M. D.	WEEK DAYS.	Gloucester.					Ilfracombe.					Llanelly.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H. M.	H. M.	H. M.	H. M.	F. I.	H. M.	H. M.	H. M.	H. M.	F. I.	H. M.	H. M.	H. M.	H. M.	F. I.
1	Wednesday	8 20	8 43	28	10		6 11	6 36	21	4		6 49	7 14	21	1	
2	Thursday	9 7	9 29	29	4		6 58	7 20	21	5		7 36	7 58	21	1	
3	Friday ..	9 48	10 7	29	1		7 40	8 12	21	4		8 18	8 39	21	1	
4	Saturday..	10 27	10 45	27	11		8 21	8 41	20	7		8 59	9 19	21		
5	Sunday ..	11 2	11 18	26	0		9 0	9 17	19	7		9 37	9 55	20		
6	Monday..	11 31	11 47	24	1		9 35	9 53	18	5		10 13	10 31	19		
7	Tuesday..	..	0 4	21	0		10 11	10 29	17	3		10 49	11 7	17		
8	Wednesday	0 21	0 42	18	8		10 51	11 11	15	7		11 29	11 49	16		
9	Thursday	1 9	1 40	16	9		11 39	..	14	5		..	0 17	14	1	
10	Friday ..	2 15	2 51	16	7		0 8	0 48	14	1		0 46	1 26	14		
11	Saturday..	3 28	4 6	17	0		1 28	2 10	14	5		2 6	2 48	14	1	
12	Sunday ..	4 47	5 27	18	0		2 52	3 22	15	7		3 30	4 0	16		
13	Monday..	5 58	6 22	20	4		3 51	4 16	16	10		4 29	4 54	17		
14	Tuesday..	6 48	7 11	21	10		4 41	5 4	18	1		5 19	5 42	18		
15	Wednesday	7 33	7 55	23	11		5 27	5 45	19	1		6 5	6 23	19		
16	Thursday	8 16	8 33	25	6		6 3	6 22	19	8		6 41	7 0	20		
17	Friday ..	8 51	9 9	27	3		6 42	6 58	20	4		7 20	7 36	20	10	
18	Saturday..	9 26	9 44	28	0		7 16	7 34	20	9		7 54	8 12	21		
19	Sunday ..	10 0	10 18	27	8		7 53	8 12	21	0		8 31	8 50	21		
20	Monday..	10 35	10 53	27	6		8 30	8 49	21	0		9 8	9 27	21		
21	Tuesday..	11 8	11 26	27	3		9 9	9 29	20	3		9 47	10 7	20		
22	Wednesday	11 42	12 0	25	8		9 48	10 11	19	5		10 26	10 49	19	11	
23	Thursday	..	0 22	23	1		10 34	11 0	18	0		11 12	11 38	18		
24	Friday ..	0 49	1 20	22	0		11 24	..	16	4		..	0 2	16	10	
25	Saturday..	1 58	2 42	18	10		0 2	0 8	15	0		0 38	1 15	16		
26	Sunday ..	3 27	4 15	20	6		1 26	2 16	16	7		2 4	2 54	17	1	
27	Monday..	5 2	5 42	22	0		2 57	3 39	17	9		3 35	4 17	18		
28	Tuesday..	6 18	6 49	23	7		4 10	4 41	19	5		4 48	5 19	19	11	
29	Wednesday	7 19	7 44	26	6		5 14	5 36	20	10		5 50	6 14	21	4	
30	Thursday	8 8	8 31	28	6		5 57	6 19	21	3		6 35	6 57	21	9	
31	Friday ..	8 50	9 10	29	5		6 41	7 4	21	9		7 19	7 42	22	8	

The above are in Greenwich Time, if local Mean Time be required for
 Glo'ster, *sub.* 10m.—Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 7th, 10h. 47m. p.m. | Last Quarter. 23rd, 6h. 37m. a.m.
 Full Moon .. 16th, 1h. 55m. a.m. | New Moon .. 30th, 2h. 49m. a.m.

M. D.	WEEK DAYS.	Newport.				Pembroke Dock.				Swansea.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	7	28	7	54	29	9	6	46	7	10	21	0
2	Thursday	8	16	8	36	30	3	7	34	7	56	21	1
3	Friday	8	58	9	15	30	1	8	16	8	37	21	0
4	Saturday	9	33	9	51	28	11	8	59	9	20	20	4
5	Sunday	10	9	10	26	27	3	9	38	9	55	19	5
6	Monday	10	45	11	0	25	6	10	11	10	29	18	5
7	Tuesday	11	18	11	34	22	8	10	47	11	4	17	3
8	Wednesday	11	55	..	..	20	6	11	23	11	46	15	9
9	Thursday	0	18	0	46	18	8	..	0	14	14	10	..
10	Friday	1	15	1	58	18	7	0	47	1	24	14	6
11	Saturday	2	33	3	22	19	0	2	4	2	44	14	10
12	Sunday	3	54	4	20	19	10	3	23	3	59	15	9
13	Monday	4	56	5	27	22	1	4	28	4	52	16	11
14	Tuesday	5	42	6	18	23	4	5	17	5	40	18	1
15	Wednesday	6	34	7	0	25	4	6	2	6	23	19	0
16	Thursday	7	15	7	33	26	9	6	42	7	0	19	6
17	Friday	7	55	8	16	28	4	7	18	7	36	20	2
18	Saturday	8	32	8	51	29	0	7	53	8	12	20	8
19	Sunday	9	4	9	24	28	8	8	30	8	49	20	6
20	Monday	9	40	10	4	28	6	9	8	9	28	20	4
21	Tuesday	10	19	10	44	28	4	9	44	10	3	20	0
22	Wednesday	11	0	11	22	26	11	10	24	10	43	19	3
23	Thursday	11	45	..	..	24	6	11	5	11	29	18	0
24	Friday	0	16	0	42	21	11	11	56	..	16	6	11
25	Saturday	1	20	2	0	20	7	0	31	1	14	15	11
26	Sunday	2	42	3	28	22	2	2	3	2	52	16	8
27	Monday	4	15	4	49	23	7	3	36	4	13	17	9
28	Tuesday	5	26	5	57	26	6	4	47	5	18	19	3
29	Wednesday	6	23	6	55	27	8	5	48	6	13	20	7
30	Thursday	7	18	7	42	29	6	6	35	6	57	20	11
31	Friday	8	0	8	21	30	4	7	17	7	37	21	5

The above are in Greenwich Time, if local Mean Time be required for
 Newport, *sub.* 12m.—Pembroke Dock, *sub.* 20m.—Swansea, *sub.* 15m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 6th, 8h. 11m. p.m. | Last Quarter.. 21st, 2h. 17m. p.m.

Full Moon .. 14th, 5h. 6m. p.m. | New Moon .. 28th, 4h. 49m. p.m.

M. D.	WEEK DAYS.	Gloucester.				Ilfracombe.				Llanelly.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Saturday..	9	27	9	45	29	6	7	17	7	39	21	8
2	Sunday ..	10	2	10	17	29	0	7	53	8	11	21	4
3	Monday..	10	32	10	47	27	11	8	29	8	46	20	7
4	Tuesday..	11	0	11	14	25	8	9	0	9	15	19	1
5	Wednesday	11	28	11	42	23	1	9	33	9	51	17	10
6	Thursday..	11	57	..	20	2		10	16	10	26	16	6
7	Friday ..	0	16	0	40	17	3	10	47	11	12	15	6
8	Saturday..	1	9	1	45	15	6	11	46	..	13	9	..
9	Sunday ..	2	20	3	9	15	1	0	22	1	12	13	7
10	Monday..	3	55	4	39	16	7	1	53	2	41	14	5
11	Tuesday..	5	22	5	56	19	3	3	17	3	52	16	2
12	Wednesday	6	21	6	46	22	3	4	13	4	35	16	11
13	Thursday..	7	12	7	32	23	11	5	8	5	27	19	3
14	Friday ..	7	52	8	10	26	2	5	46	5	58	19	10
15	Saturday..	8	30	8	47	28	6	6	17	6	35	21	4
16	Sunday ..	9	5	9	23	30	4	6	54	7	12	22	1
17	Monday..	9	40	10	0	31	2	7	30	7	50	22	6
18	Tuesday..	10	15	10	33	30	4	8	10	8	30	22	0
19	Wednesday	10	51	11	8	28	10	8	50	9	10	21	0
20	Thursday..	11	23	11	42	26	0	9	30	9	53	19	6
21	Friday ..	..	0	0	3	22	10	10	16	10	40	18	0
22	Saturday..	0	20	1	3	19	8	11	12	11	42	15	9
23	Sunday ..	1	42	2	30	18	3	..	0	0	30	15	5
24	Monday..	3	20	4	9	19	4	1	18	2	12	16	6
25	Tuesday..	4	56	5	36	21	4	2	57	3	30	17	5
26	Wednesday	6	9	6	37	23	0	4	0	4	30	19	1
27	Thursday..	7	5	7	29	26	0	4	55	5	19	20	7
28	Friday ..	7	49	8	10	27	9	5	39	5	58	20	11

The above are in Greenwich Time, if local Mean Time be required for
 Gloucester, *sub.* 10m.—Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 6th, 8h. 11m. p.m. | Last Quarter.. 21st, 2h. 17m. p.m.
 Full Moon .. 14th, 5h. 6m. p.m. | New Moon .. 28th, 4h. 49m. p.m.

M. D.	WEEK DAYS.	Newport.				Pembroke Dock.				Swansea.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Saturday..	8	39	8	57	30	6	7	54	8	13	21	4
2	Sunday ..	9	11	9	26	30	0	8	32	8	48	21	0
3	Monday..	9	44	9	56	28	11	9	4	9	20	20	4
4	Tuesday..	10	14	10	24	26	11	9	37	9	52	19	0
5	Wednesdy	10	40	10	50	24	6	10	8	10	24	17	10
6	Thursday..	11	6	11	17	21	11	10	40	10	59	16	7
7	Friday ..	11	38	12	0	19	2	11	20	11	46	15	8
8	Saturday..	..	0	37	17	6		..	0	20	14	2	
9	Sunday ..	1	20	2	18	17	2	0	57	1	43	14	0
10	Monday..	2	57	3	50	18	7	2	32	3	15	14	10
11	Tuesday..	4	20	4	58	21	0	3	54	4	26	16	3
12	Wednesdy	5	24	5	53	23	9	4	52	5	15	17	9
13	Thursday..	6	11	6	35	25	4	5	41	6	1	19	2
14	Friday ..	7	0	7	19	27	5	6	20	6	37	19	8
15	Saturday..	7	30	7	56	29	6	6	56	7	14	21	0
16	Sunday ..	8	12	8	38	31	3	7	32	7	50	21	9
17	Monday..	8	47	9	8	32	0	8	8	8	27	22	1
18	Tuesday..	9	26	9	47	31	3	8	46	9	52	1	8
19	Wednesdy	10	3	10	25	29	9	9	26	9	44	20	9
20	Thursday..	10	39	11	1	27	3	10	2	10	24	19	4
21	Friday ..	11	20	11	47	24	4	10	46	11	12	18	0
22	Saturday..	..	0	13	21	5		11	41	..	15	11	
23	Sunday ..	0	50	1	42	20	1	0	16	1	0	15	7
24	Monday..	2	34	3	23	21	1	1	55	2	46	16	2
25	Tuesday..	4	7	4	45	23	0	3	31	4	7	17	6
26	Wednesdy	5	18	5	47	26	0	4	39	5	6	19	0
27	Thursday..	6	14	6	35	27	3	5	34	5	57	20	4
28	Friday ..	6	58	7	19	28	10	6	18	6	37	20	8

The above are in Greenwich Time, if local Mean Time be required for
 Newport, *sub.* 12m.—Pembroke Dock, *sub.* 20m.—Swansea, *sub.* 15 m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 8th, 5h. 21m. p.m. | Last Quarter.. 22nd, 9h. 49m. p.m.
 Full Moon .. 16th, 5h. 17m. a.m. | New Moon .. 30th, 7h. 45m. a.m.

M. D.	WEEK DAYS.	Equation of Time.	Moon's Trans- sit.	London.		Liverpool.		Barnstaple.			
				Morn.	Even.	Morn.	Even.	Morn.	Even.	Height	
		M. S.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	F. I.	
1	Satur..	12 35	0a 41	2 34	2 53	11 55	..	6 7	6 26	27	9
2	Sunday	12 23	1 25	3 10	3 26	0 12	0 29	6 41	6 57	27	9
3	Mon ..	12 10	2 9	3 42	3 59	0 46	1 3	7 13	7 28	27	5
4	Tues ..	11 57	2 53	4 15	4 29	1 17	1 33	7 47	8 2	26	9
5	Wednes	11 44	3 39	4 45	5 0	1 48	2 2	8 18	8 34	25	10
6	Thurs..	11 30	4 26	5 15	5 31	2 18	2 34	8 50	9 4	24	8
7	Friday..	11 15	5 14	5 47	6 6	2 51	3 10	9 23	9 43	23	4
8	Satur..	11 0	6 4	6 26	6 47	3 31	3 53	10 5	10 26	22	0
9	Sunday	10 45	6 54	7 10	7 36	4 19	4 56	10 56	11 29	20	10
10	Mon ..	10 30	7 44	8 12	8 55	5 38	6 28	..	0 11	20	6
11	Tues ..	10 14	8 34	9 40	10 25	7 16	7 56	0 55	1 38	21	3
12	Wednes	9 57	9 23	11 7	11 46	8 33	9 3	2 22	2 58	22	8
13	Thurs..	9 41	10 12	..	0 17	9 29	9 52	3 23	3 48	24	6
14	Friday..	9 24	11 1	0 43	1 7	10 9	10 30	4 14	4 40	26	0
15	Satur..	9 7	11 50	1 26	1 48	10 51	11 8	5 5	5 18	27	3
16	Sunday	8 49	morn.	2 8	2 24	11 27	11 46	5 38	5 57	28	3
17	Mon ..	8 32	0 41	2 43	3 1	..	0 4	6 17	6 38	28	9
18	Tues ..	8 14	1 34	3 18	3 39	0 26	0 44	6 58	7 18	29	1
19	Wednes	7 56	2 30	3 57	4 18	1 6	1 24	7 39	8 0	28	5
20	Thurs ..	7 38	3 28	4 36	4 56	1 44	2 6	8 22	8 44	27	4
21	Friday..	7 20	4 29	5 19	5 42	2 29	2 51	9 7	9 32	26	0
22	Satur..	7 2	5 29	6 6	6 32	3 16	3 45	9 57	10 25	24	1
23	Sunday	6 43	6 28	7 2	7 34	4 17	4 55	10 53	11 30	21	8
24	Mon ..	6 25	7 25	8 11	8 57	5 40	6 33	..	0 8	21	8
25	Tues ..	6 6	8 17	9 44	10 29	7 20	8 3	0 57	1 46	22	7
26	Wednes	5 48	9 6	11 14	11 50	8 37	9 6	2 28	3 0	23	10
27	Thurs..	5 30	9 53	..	0 20	9 33	9 54	3 26	4 0	25	3
28	Friday..	5 11	10 37	0 48	1 10	10 15	10 32	4 17	4 40	26	2
29	Satur..	4 53	11 21	1 32	1 50	10 51	11 8	5 0	5 22	26	11
30	Sunday	4 34	0a 4	2 8	2 24	11 27	11 44	5 38	5 55	27	0
31	Mon ..	4 16	0 48	2 43	2 59	12 0	..	6 13	6 31	27	1

The above are in Greenwich Time, if local Mean Time be required for
 Liverpool, *sub.* 12m.—Barnstaple, *sub.* 17m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 8th, 5h. 21m. p.m. | Last Quarter. 22nd, 9h. 49m. p.m.
 Full Moon .. 16th, 5h. 17m. a.m. | New Moon .. 30th, 7h. 45m. a.m.

M. D.	WEEK DAYS.	Bridgwater.					Bristol.					Cardiff.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Saturday..	8	0	8	16	15	9	7	49	8	6	30	6	7	30	7	46	27	5
2	Sunday ..	8	33	8	47	15	9	8	23	8	37	30	6	8	0	8	14	27	8
3	Monday..	9	2	9	15	15	4	8	52	9	5	29	10	8	29	8	46	27	4
4	Tuesday..	9	29	9	42	14	6	9	19	9	32	28	6	9	0	9	12	26	4
5	Wednesday	9	56	10	9	13	4	9	46	9	59	26	8	9	26	9	39	25	0
6	Thursday..	10	23	10	36	11	10	10	13	10	26	24	5	9	53	10	6	23	0
7	Friday ..	10	49	10	58	10	2	10	39	10	48	21	8	10	18	10	28	20	9
8	Saturday..	11	15	11	32	8	6	11	5	11	22	18	8	10	45	11	2	18	8
9	Sunday ..	..	0	5	7	0		11	55	..	16	8		11	35	..	16	9	
10	Monday..	0	32	1	30	6	7	0	22	1	20	15	8	0	2	1	0	16	4
11	Tuesday..	2	16	3	22	7	6	2	6	3	12	16	10	1	46	2	52	17	4
12	Wednesday	3	54	4	42	9	4	3	44	4	32	19	11	3	22	4	10	19	4
13	Thursday..	5	6	5	40	11	8	4	56	5	30	23	5	4	38	5	10	22	2
14	Friday ..	6	0	6	29	13	6	5	50	6	19	26	5	5	30	6	0	24	8
15	Saturday..	6	48	7	14	15	1	6	38	7	4	29	0	6	18	6	44	25	8
16	Sunday ..	7	32	8	15	15	10	7	22	8	5	30	8	7	2	7	43	27	9
17	Monday..	8	13	8	33	17	0	8	3	8	23	31	10	7	53	8	3	29	2
18	Tuesday..	8	51	9	11	17	5	8	41	9	1	32	1	8	21	8	40	29	10
19	Wednesday	9	27	9	48	16	7	9	17	9	38	31	5	8	57	9	20	29	0
20	Thursday..	10	3	10	24	15	2	9	53	10	14	29	7	9	35	9	54	27	5
21	Friday ..	10	42	11	5	13	6	10	32	10	55	27	2	10	12	10	35	25	3
22	Saturday..	11	27	11	54	11	2	11	17	11	44	24	1	10	57	11	24	22	0
23	Sunday ..	..	0	33	8	0		..	0	23	21	6		..	0	3	19	8	
24	Monday..	1	0	1	49	8	0	0	50	1	39	19	9	0	30	1	19	18	4
25	Tuesday..	2	39	3	30	9	3	2	29	3	20	20	3	2	9	3	0	19	7
26	Wednesday	4	14	4	48	10	10	4	4	4	38	22	11	3	42	4	16	21	6
27	Thursday..	5	19	5	45	12	7	5	9	5	35	25	5	4	48	5	16	23	5
28	Friday ..	6	10	6	33	13	9	6	0	6	23	27	3	5	40	6	3	25	0
29	Saturday..	6	55	7	14	14	8	6	45	7	4	28	9	6	26	6	44	25	7
30	Sunday ..	7	31	7	46	14	9	7	21	7	36	29	7	7	0	7	17	26	3
31	Monday..	8	2	8	17	14	11	7	52	8	7	29	9	7	32	7	50	26	6

The above are in Greenwich Time, if local Mean Time be required for
 Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.—Cardiff, *sub.* 13m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 8th, 5h. 21m. p.m. | Last Quarter.. 22nd, 9h. 49m. p.
 Full Moon .. 16th, 5h. 17m. a.m. | New Moon .. 30th, 7h. 45m. a.

M. D.	WEEK DAYS.	Gloucester.				Ilfracombe.				Llanelly.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Saturday..	8	28	8	44	29	0	6	17	6	36	21	7
2	Sunday ..	9	0	9	18	29	4	6	51	7	7	21	7
3	Monday..	9	34	9	47	28	11	7	23	7	38	21	3
4	Tuesday..	10	2	10	16	27	8	7	57	8	12	20	6
5	Wednesday	10	30	10	44	26	0	8	28	8	44	19	6
6	Thursday..	10	58	11	13	23	6	9	0	9	14	18	2
7	Friday ..	11	28	11	44	20	8	9	33	9	53	16	9
8	Saturday..	..	0	3	18	1	10	15	10	36	15	3	10
9	Sunday ..	0	26	0	58	15	8	11	6	11	39	13	11
10	Monday..	1	34	2	19	15	2	..	0	21	13	7	0
11	Tuesday..	3	5	3	48	16	5	1	5	1	48	14	5
12	Wednesday	4	31	5	8	18	11	2	32	3	8	16	0
13	Thursday..	5	41	6	10	22	5	3	33	4	0	18	0
14	Friday ..	6	31	6	57	24	4	4	24	4	50	19	8
15	Saturday..	7	20	7	39	26	10	5	15	5	28	21	0
16	Sunday ..	7	58	8	19	29	5	5	48	6	7	21	8
17	Monday..	8	36	8	58	31	2	6	27	6	48	22	8
18	Tuesday..	9	16	9	37	32	0	7	8	7	28	23	1
19	Wednesday	9	54	10	13	31	0	7	49	8	11	22	4
20	Thursday..	10	34	10	54	29	0	8	32	8	54	21	1
21	Friday ..	11	13	11	33	26	4	9	17	9	42	19	8
22	Saturday..	11	56	..	22	3	10	7	10	35	17	7	10
23	Sunday ..	0	23	0	56	19	4	11	3	11	40	14	10
24	Monday..	1	36	2	23	17	8	..	0	18	14	10	0
25	Tuesday..	3	9	3	55	19	3	1	7	1	56	15	11
26	Wednesday	4	35	5	12	21	7	2	38	3	9	17	4
27	Thursday..	5	47	6	13	24	0	3	36	4	10	18	10
28	Friday ..	6	38	7	0	25	1	4	27	4	50	19	10
29	Saturday..	7	20	7	39	26	9	5	11	5	32	20	8
30	Sunday ..	8	0	8	17	27	7	5	48	6	5	20	9
31	Monday..	8	33	8	50	27	11	6	23	6	41	20	10

The above are in Greenwich Time, if local Mean Time be required for
 Glo'ster, *sub.* 10m.—Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m
 For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 8th, 5h. 21m. p.m. | Last Quarter.. 22nd, 9h. 49m. p.m.
 Full Moon .. 16th, 5h. 17m. a.m. | New Moon .. 30th, 7h. 45m. a.m.

M. D.	WEEK DAYS.	Newport.				Pembroke Dock.				Swansea.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Saturday ..	7	40	7	56	30	0	6	54	7	11	21	3
2	Sunday ..	8	10	8	24	30	3	7	28	7	45	21	3
3	Monday ..	8	39	8	56	29	11	8	1	8	15	20	11
4	Tuesday ..	9	9	9	22	28	9	8	32	8	47	20	3
5	Wednesday ..	9	56	9	49	27	3	9	2	9	20	19	4
6	Thursday ..	10	3	10	16	25	0	9	33	9	50	18	2
7	Friday ..	10	28	10	38	22	4	10	8	10	26	16	10
8	Saturday ..	10	55	11	12	20	0	10	46	11	8	15	6
9	Sunday ..	11	45	..	17	8		11	35	..	14	4	
10	Monday ..	0	12	1	10	17	3	0	10	0	51	14	0
11	Tuesday ..	1	56	3	2	18	5	1	39	2	25	14	9
12	Wednesday ..	3	32	4	20	20	9	3	8	3	42	16	2
13	Thursday ..	4	48	5	20	23	11	4	12	4	41	18	0
14	Friday ..	5	40	6	9	26	10	5	1	5	26	19	6
15	Saturday ..	6	28	6	54	27	11	5	49	6	7	20	9
16	Sunday ..	7	12	7	53	30	4	6	27	6	45	21	4
17	Monday ..	8	3	8	13	32	0	7	3	7	25	22	3
18	Tuesday ..	8	31	8	50	32	10	7	43	8	4	22	7
19	Wednesday ..	9	7	9	30	31	10	8	22	8	43	21	11
20	Thursday ..	9	45	10	4	30	0	9	6	9	29	20	10
21	Friday ..	10	22	10	45	27	6	9	50	10	13	19	6
22	Saturday ..	11	7	11	34	23	9	10	39	11	6	17	7
23	Sunday ..	..	0	13	21	1		11	35	..	15	2	
24	Monday ..	0	40	1	29	19	7	0	10	0	54	15	2
25	Tuesday ..	2	19	3	10	21	0	1	43	2	32	16	1
26	Wednesday ..	3	52	4	26	23	2	3	12	3	45	17	4
27	Thursday ..	4	58	5	26	25	5	4	7	4	44	18	9
28	Friday ..	5	50	6	13	27	3	5	7	5	28	19	8
29	Saturday ..	6	36	6	54	27	10	5	49	6	7	20	5
30	Sunday ..	7	11	7	27	28	7	6	27	6	43	20	6
31	Monday ..	7	42	8	0	28	11	7	0	7	16	20	7

The above are in Greenwich Time, if local Mean Time be required for
 Newport, *sub.* 12m.—Pembroke Dock, *sub.* 20m.—Swansea, *sub.* 15m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 7th, 0h. 13m. p.m. | Last Quarter. 21st, 6h. 3m. a.m.
 Full Moon .. 14th, 2h. 57m. p.m. | New Moon .. 28th, 11h. 27m. p.m.

M. D.	WEEK DAYS.	Equation of Time.	Moon's Trans- sit.	London.		Liverpool.		Barnstaple.			
				Morn.	Even.	Morn.	Even.	Morn.	Even.	Height	
		M. S.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	F. I.	
1	Tues ..	3 58	1a34	3 15	3 32	0 18	0 33	6 46	7 0	26	10
2	Wednes	3 40	2 20	3 46	4 1	0 49	1 5	7 17	7 33	26	3
3	Thurs..	3 22	3 8	4 17	4 32	1 20	1 37	7 50	8 7	25	4
4	Friday.	3 4	3 57	4 49	5 5	1 52	2 8	8 24	8 41	24	5
5	Satur..	2 47	4 46	5 21	5 38	2 25	2 43	9 0	9 17	23	4
6	Sunday	2 29	5 36	5 57	6 18	3 3	3 26	9 37	9 57	22	3
7	Mon ..	2 12	6 25	6 42	7 8	3 51	4 24	10 26	10 56	21	6
8	Tues ..	1 55	7 13	7 41	8 19	5 3	5 44	11 32	..	21	1
9	Wednes	1 38	8 1	9 1	9 42	6 30	7 12	0 8	0 50	21	6
10	Thurs..	1 21	8 48	10 21	10 59	7 49	8 20	1 30	2 5	22	10
11	Friday.	1 5	9 37	11 32	..	8 47	9 11	2 39	3 5	24	7
12	Satur..	0 49	10 27	12 0	0 25	9 33	9 54	3 31	3 55	26	1
13	Sunday	0 33	11 19	0 47	1 10	10 14	10 33	4 23	4 44	27	3
14	Mon ..	0 17	morn.	1 31	1 51	10 53	11 14	5 6	5 28	28	0
15	Tues ..	0 2	0 15	2 10	2 30	11 36	11 59	5 52	6 14	28	1
16	Wednes	0 13	1 14	2 52	3 14	..	0 22	6 36	7 0	29	1
17	Thurs..	0 27	2 16	3 36	3 57	0 44	1 8	7 23	7 46	28	4
18	Friday.	0 41	3 19	4 20	4 43	1 31	1 55	8 20	8 34	26	11
19	Satur..	0 55	4 21	5 8	5 33	2 20	2 45	9 0	9 25	25	9
20	Sunday	1 8	5 19	5 59	6 25	3 9	3 39	9 51	10 18	24	1
21	Mon ..	1 21	6 14	6 56	7 29	4 12	4 48	10 46	11 20	22	7
22	Tues ..	1 33	7 4	8 4	8 46	5 29	6 5	11 54	..	22	3
23	Wednes	1 45	7 51	9 20	10 9	6 59	7 36	0 33	1 12	22	7
24	Thurs..	1 56	8 36	10 45	11 20	8 8	8 35	1 55	2 24	23	3
25	Friday.	2 7	9 19	11 48	..	9 1	9 24	2 53	3 22	24	7
26	Satur..	2 18	10 2	0 14	0 38	9 45	10 4	3 45	4 9	25	3
27	Sunday	2 27	10 46	1 0	1 20	10 23	10 39	4 30	4 51	26	0
28	Mon ..	2 37	11 30	1 40	1 57	10 58	11 15	5 11	5 31	26	1
29	Tues ..	2 46	0a16	2 14	2 31	11 31	11 48	5 48	6 5	26	4
30	Wednes	2 54	1 3	2 47	3 3	..	0 5	6 23	6 41	26	3

The above are in Greenwich Time, if local Mean Time be required for
 Liverpool, *sub.* 12m —Barnstaple, *sub.* 17m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 7th, 0h. 13m. p.m. | Last Quarter. 21st, 6h. 3m. a.m.
 Full Moon .. 14th, 2h. 57m. p.m. | New Moon .. 28th, 11h. 27m. p.m.

W. D.	WEEK DAYS.	Bridgwater.					Bristol.					Cardiff.				
		Morn.	Even.	Height			Morn.	Even.	Height			Morn.	Even.	Height		
		H. M.	H. M.	F. I.			H. M.	H. M.	F. I.			H. M.	H. M.	F. I.		
1	Tuesday..	8 35	8 42	14 7			8 25	8 32	29 2			8 4	8 12	26 4		
2	Wednesday	9 0	9 10	13 10			8 50	9 0	28 1			8 33	8 40	25 5		
3	Thursday..	9 30	9 37	12 8			9 20	9 27	26 6			9 0	9 9	24 2		
4	Friday ..	9 57	10 5	11 7			9 47	9 55	24 6			9 27	9 35	22 10		
5	Saturday..	10 26	10 33	10 2			10 16	10 23	22 2			9 56	10 3	21 1		
6	Sunday ..	10 54	11 1	8 10			10 44	10 51	19 8			10 22	10 32	19 3		
7	Monday..	11 31	12 0	7 10			11 21	11 50	17 5			11 0	11 30	17 9		
8	Tuesday..	..	0 50	7 4			..	0 40	16 4			..	0 19	17 1		
9	Wednesday	1 30	2 30	7 10			1 20	2 21	17 3			1 0	2 0	17 9		
10	Thursday..	3 4	3 57	9 7			2 54	3 47	20 2			2 34	3 27	19 9		
11	Friday ..	4 22	5 2	11 9			4 12	4 52	23 7			3 52	4 32	22 5		
12	Saturday..	5 21	5 52	13 8			5 11	5 42	26 3			4 51	5 22	24 10		
13	Sunday ..	6 11	6 41	15 1			6 1	6 31	28 9			5 41	6 11	26 10		
14	Monday..	7 0	7 26	16 0			6 50	7 16	30 7			6 32	6 56	27 10		
15	Tuesday..	7 45	8 7	16 2			7 35	7 57	31 8			7 15	7 36	29 1		
16	Wednesday	8 28	8 50	17 5			8 18	8 40	31 11			7 56	8 16	29 10		
17	Thursday..	9 10	9 28	16 5			9 0	9 18	31 2			8 40	8 58	29 0		
18	Friday ..	9 51	10 11	14 8			9 41	10 1	29 6			9 22	9 41	27 0		
19	Saturday..	10 33	10 57	13 3			10 23	10 47	27 0			10 4	10 27	24 10		
20	Sunday ..	11 23	11 51	11 2			11 13	11 41	24 1			10 53	11 21	22 0		
21	Monday..	..	0 22	9 3			..	0 12	22 0			11 52	..	19 8		
22	Tuesday..	0 57	1 40	8 10			0 47	1 30	20 8			0 28	1 10	19 2		
23	Wednesday	2 23	3 0	9 3			2 13	2 50	20 8			1 53	2 30	19 5		
24	Thursday..	3 40	4 14	10 1			3 30	4 4	22 4			3 10	3 44	20 7		
25	Friday ..	4 44	5 10	11 9			4 34	5 0	24 0			4 14	4 37	22 5		
26	Saturday..	5 35	5 56	12 7			5 25	5 46	25 8			5 5	5 26	23 7		
27	Sunday ..	6 18	6 37	13 6			6 8	6 27	26 11			5 48	6 4	24 10		
28	Monday..	6 58	7 11	13 8			6 48	7 1	27 8			6 27	6 41	25 0		
29	Tuesday..	7 31	7 44	13 10			7 21	7 34	27 10			7 0	7 14	25 5		
30	Wednesday	8 2	8 12	13 10			7 52	8 2	27 7			7 32	7 42	24 1		

The above are in Greenwich Time, if local Mean Time be required for
 Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.—Cardiff, *sub.* 13m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 7th, 0h. 13m. p.m. | Last Quarter.. 21st, 6h. 3m. a.m.

Full Moon .. 14th, 2h. 57m. p.m. | New Moon .. 28th, 11h. 27m. p.m.

M. D.	WEEK DAYS.	Gloucester.				Ilfracombe.				Llanelly.			
		Morn.	Even.	Height		Morn.	Even.	Height		Morn.	Even.	Height	
		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.	
1	Tuesday..	9 5	9 20	27 8		6 56	7 11	20 7		7 34	7 49	21 1	
2	Wednesday	9 36	9 50	26 6		7 27	7 43	19 11		8 5	8 21	20 5	
3	Thursday..	10 6	10 21	24 11		8 6	8 17	18 11		8 38	8 55	19 5	
4	Friday ..	10 35	10 50	23 3		8 34	8 51	17 11		9 12	9 29	18 5	
5	Saturday..	11 6	11 22	21 1		9 9	9 27	16 9		9 47	10 5	17 3	
6	Sunday ..	11 40	12 0	18 10		9 47	10 7	15 7		10 25	10 45	16 1	
7	Monday..	..	0 29	16 11		10 36	11 6	14 8		11 14	11 44	15 2	
8	Tuesday..	1 3	1 40	16 1		11 42	..	14 3		..	0 20	14 9	
9	Wednesday	2 21	3 0	16 11		0 18	1 0	14 8		0 56	1 37	15 2	
10	Thursday.	3 39	4 15	19 5		1 40	2 15	16 2		2 18	2 53	16 8	
11	Friday ..	4 47	5 18	22 9		2 49	3 15	18 1		3 27	3 58	18 7	
12	Saturday..	5 46	6 13	25 9		3 41	4 5	19 9		4 19	4 43	20 3	
13	Sunday ..	6 37	7 0	27 0		4 32	4 54	21 0		5 10	5 32	21 6	
14	Monday..	7 23	7 45	29 6		5 16	5 38	21 10		5 54	6 16	22 4	
15	Tuesday..	8 9	8 32	31 1		6 1	6 24	22 0		6 39	7 2	22 6	
16	Wednesday	8 54	9 16	32 0		6 47	7 10	23 1		7 25	7 48	23 7	
17	Thursday.	9 38	10 0	31 0		7 33	7 56	22 2		8 11	8 34	22 8	
18	Friday ..	10 24	10 46	28 5		8 20	8 44	20 8		8 58	9 22	21 2	
19	Saturday..	11 8	11 27	25 9		9 9	9 35	19 5		9 47	10 13	19 11	
20	Sunday ..	11 52	..	22 3		10 1	10 28	17 7		10 39	11 6	18 1	
21	Monday..	0 17	0 49	19 4		10 56	11 30	15 11		11 34	..	16 5	
22	Tuesday..	1 26	1 58	18 8		..	0 4	15 7		0 18	0 42	16 1	
23	Wednesday	2 48	3 25	19 0		0 43	1 22	15 11		1 21	2 0	16 5	
24	Thursday.	4 1	4 33	20 6		2 5	2 34	16 8		2 43	3 12	17 2	
25	Friday ..	5 4	5 34	22 9		3 3	3 32	18 1		3 41	4 10	18 7	
26	Saturday..	6 2	6 25	24 3		3 55	4 19	18 10		4 33	4 57	19 4	
27	Sunday ..	6 18	7 7	24 11		4 40	5 1	19 8		5 18	5 39	20 2	
28	Monday..	7 27	7 46	25 9		5 21	5 41	19 9		6 0	6 19	20 3	
29	Tuesday..	8 4	8 21	26 2		5 58	6 15	19 11		6 36	6 53	20 5	
30	Wednesday	8 37	8 54	26 4		6 33	6 51	19 11		7 11	7 29	20 5	

The above are in Greenwich Time, if local Mean Time be required for
 Gloucester, *sub.* 10m.—Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 7th, Oh. 13m. p.m. | Last Quarter.. 21st, 6h. 3m. a.m.
 Full Moon .. 14th; 2h. 57m. p.m. | New Moon .. 28th, 11h. 27m. p.m.

WEEK DAYS	Newport.				Pembroke Dock.				Swansea.			
	Morn.		Even.		Height		Morn.		Even.		Height	
	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
Tuesday..	8	14	8	22	28	9	7	32	7	47	20	4
Wednesday	8	43	8	50	27	8	8	3	8	18	19	9
Thursday..	9	10	9	19	26	3	8	36	8	52	18	10
Friday ..	9	37	9	45	24	9	9	8	9	25	17	11
Saturday..	10	6	10	13	22	9	9	42	10	1	16	10
Sunday ..	10	32	10	42	20	7	10	22	10	44	15	9
Monday..	11	11	11	40	18	10	11	12	11	41	15	0
Tuesday..	..	..	0	29	18	1	..	..	0	14	14	7
Wednesday	1	10	2	11	18	10	0	52	1	34	15	0
Thursday..	2	44	3	37	21	2	2	16	2	52	16	4
Friday ..	4	2	4	42	24	3	3	23	3	51	18	1
Saturday..	5	1	5	32	27	1	4	16	4	44	19	7
Sunday ..	5	51	6	21	29	4	5	6	5	29	20	9
Monday..	6	42	7	6	30	6	5	51	6	14	21	5
Tuesday..	7	25	7	46	31	11	6	36	6	58	21	7
Wednesday	8	6	8	26	32	10	7	20	7	43	22	7
Thursday..	8	50	9	8	31	10	8	6	8	30	21	10
Friday ..	9	32	9	51	29	5	8	55	9	20	20	5
Saturday..	10	14	10	37	27	1	9	44	10	7	19	3
Sunday ..	11	3	11	31	23	9	10	34	11	2	17	7
Monday..	..	..	0	2	21	1	11	29	..	..	16	1
Tuesday..	0	38	1	20	20	6	0	2	0	40	15	9
Wednesday	2	3	2	40	20	10	1	20	2	1	16	1
Thursday..	3	20	3	54	22	2	2	39	3	10	16	9
Friday ..	4	24	4	47	24	3	3	39	4	6	18	1
Saturday..	5	15	5	36	25	7	4	32	4	55	18	9
Sunday ..	5	58	6	14	26	3	5	17	5	36	19	6
Monday..	6	37	6	51	27	1	5	56	6	15	19	6
Tuesday..	7	11	7	24	27	5	6	31	6	47	19	10
Wednesday	7	42	7	52	27	6	7	4	7	20	19	9

The above are in Greenwich Time, if local Mean Time be required for
 Newport, *sub.* 12m.—Pembroke Dock, *sub.* 20m.—Swansea, *sub.* 15 m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 7th, 3h. 24m. a.m. | Last Quarter.. 20th, 3h. 38m. p.m.
 Full Moon .. 13th, 11h. 0m. p.m. | New Moon .. 28th, 3h. 26m. p.m.

M. D.	WEEK DAYS.	Equation of Time.	Moon's Trans- sit.	London.		Liverpool.		Barnstaple.			
				Morn.	Even.	Morn.	Even.	Morn.	Even.	Height	
		M. S.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	F.	I.
1	Thurs..	3 2	1a52	3 19	3 36	0 22	0 39	6 56	7 11	26	0
2	Friday..	3 9	2 41	3 52	4 9	0 57	1 14	7 28	7 45	25	4
3	Satur..	3 16	3 31	4 26	4 42	1 30	1 48	8 2	8 20	24	9
4	Sunday	3 22	4 19	5 0	5 18	2 5	2 24	8 38	8 56	23	11
5	Mon ..	3 27	5 7	5 37	5 57	2 43	3 5	9 17	9 39	23	2
6	Tues ..	3 33	5 53	6 20	6 44	3 28	3 56	10 2	10 25	22	6
7	Wednes	3 37	6 40	7 13	7 43	4 26	5 2	10 54	11 24	22	0
8	Thurs..	3 41	7 26	8 18	8 58	5 41	6 21	12 0	..	21	11
9	Friday..	3 45	8 14	9 34	10 7	6 57	7 32	0 33	1 10	22	7
10	Satur..	3 47	9 3	10 41	11 12	8 1	8 29	1 47	2 19	24	0
11	Sunday	3 50	9 57	11 42	..	8 54	9 17	2 51	3 17	25	6
12	Mon ..	3 52	10 54	0 7	0 31	9 39	10 3	3 44	4 10	26	10
13	Tues ..	3 53	11 55	0 54	1 19	10 25	10 49	4 40	5 6	28	0
14	Wednes	3 53	morn.	1 43	2 6	11 15	11 40	5 33	5 58	28	6
15	Thurs	3 53	1 0	2 31	2 55	..	0 7	6 23	6 48	28	7
16	Friday..	3 53	2 4	3 21	3 44	0 31	0 56	7 13	7 36	28	2
17	Satur..	3 52	3 7	4 8	4 31	1 19	1 46	8 0	8 24	27	1
18	Sunday	3 50	4 5	4 58	5 25	2 12	2 36	8 50	9 15	25	11
19	Mon ..	3 48	4 59	5 50	6 18	3 3	3 29	9 40	10 5	24	10
20	Tues ..	3 45	5 48	6 45	7 15	3 58	4 29	10 30	10 54	23	5
21	Wednes	3 42	6 34	7 46	8 20	5 4	5 39	11 21	11 50	22	7
22	Thurs..	3 38	7 18	8 56	9 29	6 16	6 50	..	0 22	22	3
23	Friday..	3 33	8 2	10 0	10 29	7 20	7 49	1 0	1 36	22	5
24	Satur..	3 28	8 45	11 0	11 30	8 18	8 46	2 9	2 43	23	3
25	Sunday	3 23	9 28	11 59	..	9 11	9 33	3 10	3 37	23	10
26	Mon ..	3 17	10 14	0 25	0 47	9 52	10 12	4 0	4 24	24	9
27	Tues ..	3 10	11 0	1 7	1 29	10 31	10 51	4 46	5 9	25	4
28	Wednes	3 3	11 49	1 49	2 8	11 10	11 27	5 27	5 45	25	8
29	Thurs..	2 55	0a38	2 26	2 43	11 46	..	6 2	6 20	25	9
30	Friday..	2 47	1 27	3 1	3 18	0 4	0 21	6 38	6 56	25	9
31	Satur..	2 39	2 16	3 35	3 52	0 39	0 58	7 12	7 28	25	6

The above are in Greenwich Time, if local Mean Time be required for
 Liverpool, *sub.* 12m — Barnstaple, *sub.* 17m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 7th, 3h. 24m. a.m. | Last Quarter.. 20th, 3h. 38m. p.m.
 Full Moon .. 13th, 11h. 0m. p.m. | New Moon .. 28th, 3h. 26m. p.m.

M. D.	WEEK DAYS.	Bridgwater.				Bristol.				Cardiff.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday..	8	32	8	42	13	6	8	22	8	32	27	0
2	Friday ..	9	5	9	13	12	8	8	55	9	3	25	11
3	Saturday..	9	36	9	46	12	0	9	26	9	36	24	6
4	Sunday ..	10	10	10	19	10	11	10	0	10	9	22	9
5	Monday..	10	43	10	51	10	0	10	33	10	41	21	0
6	Tuesday..	11	20	11	39	9	2	11	10	11	29	19	6
7	Wednesday	..	0	21	8	6		..	0	11	18	8	11
8	Thursday..	0	51	1	42	8	5	0	41	1	32	19	1
9	Friday ..	2	5	3	5	9	3	1	55	2	55	20	10
10	Saturday..	3	30	4	12	11	0	3	20	4	2	23	8
11	Sunday ..	4	37	5	13	12	11	4	27	5	3	25	10
12	Monday..	5	33	6	4	14	7	5	23	5	54	27	11
13	Tuesday..	6	26	6	56	16	0	6	16	6	46	29	9
14	Wednesday	7	18	7	44	16	7	7	8	7	34	30	10
15	Thursday..	8	8	8	33	16	9	7	58	8	23	31	0
16	Friday ..	8	56	9	17	16	3	8	46	9	7	30	6
17	Saturday..	9	41	10	0	14	11	9	31	9	50	29	2
18	Sunday ..	10	29	10	50	13	5	10	19	10	40	27	1
19	Monday..	11	19	11	44	12	1	11	9	11	34	25	1
20	Tuesday..	..	0	14	10	4		..	0	4	23	6	11
21	Wednesday	0	45	1	10	9	3	0	35	1	0	22	2
22	Thursday..	1	45	2	14	8	10	1	35	2	4	21	4
23	Friday ..	2	51	3	20	9	1	2	41	3	10	21	6
24	Saturday..	3	54	4	25	10	1	3	44	4	15	22	6
25	Sunday ..	4	54	5	20	10	10	4	44	5	10	23	9
26	Monday..	5	42	6	2	12	0	5	32	5	52	24	11
27	Tuesday..	6	22	6	41	12	8	6	12	6	31	25	7
28	Wednesday	7	2	7	15	12	11	6	52	7	5	26	4
29	Thursday..	7	37	7	50	13	3	7	27	7	40	26	5
30	Friday ..	8	12	8	24	13	3	8	2	8	14	26	2
31	Saturday..	8	47	8	55	12	11	8	37	8	45	25	10

The above are in Greenwich Time, if local Mean Time be required for
 Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.—Cardiff, *sub.* 13m.

For further explanations, see page 3.

First Quarter. 7th, 3h. 24m. a.m.	Last Quarter.. 20th, 3h. 38m. p.m
Full Moon .. 13th, 11h. 0m. p.m.	New Moon .. 28th, 3h. 26m. p.m.

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PHASES OF THE MOON.

First Quarter. 7th, 3h. 24m. a.m. | Last Quarter.. 20th, 3h. 38m. p.m.
 Full Moon .. 13th, 11h. 0m. p.m. | New Moon .. 28th, 3h. 26m. p.m.

M. D.	WEEK DAYS.	Newport.				Pembroke Dock.				Swansea.			
		Morn.	Even.	Height		Morn.	Even.	Height		Morn.	Even.	Height	
		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.	
1	Thursday..	8 12	8 22	26 11		7 38	7 55	19 6		7 28	7 45	21 0	
2	Friday ..	8 45	8 53	26 2		8 12	8 28	18 10		8 2	8 18	20 2	
3	Saturday..	9 14	9 23	25 1		8 47	9 5	18 3		8 37	8 55	19 6	
4	Sunday ..	9 49	9 58	23 5		9 24	9 42	17 5		9 14	9 32	18 5	
5	Monday..	10 22	10 30	22 1		10 3	10 24	16 8		9 53	10 14	17 6	
6	Tuesday..	10 59	11 19	20 9		10 49	11 12	16 0		10 39	11 2	16 8	
7	Wednesday	12 0	..	19 9		11 40	..	15 6		11 30	..	16 0	
8	Thursday..	0 31	1 22	19 10		0 12	0 45	15 5		0 2	0 35	15 11	
9	Friday ..	1 54	2 46	21 1		1 20	1 56	16 1		1 9	1 46	16 9	
10	Saturday..	3 10	3 50	23 4		2 30	3 3	17 6		2 20	2 53	18 6	
11	Sunday ..	4 19	4 53	26 1		3 31	3 58	19 0		3 21	3 48	20 5	
12	Monday..	5 13	5 44	28 6		4 24	4 54	20 4		4 14	4 44	22 1	
13	Tuesday..	6 6	6 36	29 9		5 20	5 47	21 6		5 10	5 37	23 6	
14	Wednesday	7 0	7 24	31 6		6 15	6 39	21 11		6 5	6 29	24 1	
15	Thursday..	7 54	8 16	32 0		7 6	7 30	22 1		6 56	7 20	24 3	
16	Friday ..	8 36	9 03	31 4		7 54	8 17	21 8		7 44	8 7	23 9	
17	Saturday..	9 20	9 40	29 6		8 45	9 10	20 7		8 35	9 0	22 5	
18	Sunday ..	10 9	10 30	27 1		9 36	10 0	19 5		9 26	9 51	20 11	
19	Monday..	10 59	11 24	25 1		10 25	10 50	18 4		10 15	10 40	19 7	
20	Tuesday..	11 53	..	22 7		11 15	11 42	16 11		11 5	11 32	17 10	
21	Wednesday	0 30	0 50	29 11		..	0 10	16 1		12 0	..	16 9	
22	Thursday..	1 28	2 0	20 4		0 40	1 11	15 9		0 30	1 1	16 4	
23	Friday ..	2 35	3 0	20 7		1 43	2 17	15 11		1 33	2 7	16 7	
24	Saturday..	3 34	4 5	22 1		2 50	3 22	16 9		2 40	3 12	17 7	
25	Sunday ..	4 37	5 0	23 2		3 51	4 16	17 4		3 41	4 6	18 4	
26	Monday..	5 21	5 45	24 6		4 41	5 4	18 3		4 31	4 54	19 6	
27	Tuesday..	6 2	6 25	25 1		5 27	5 49	18 10		5 17	5 39	20 2	
28	Wednesday	6 42	7 0	26 0		6 10	6 27	19 0		6 0	6 17	20 5	
29	Thursday..	7 15	7 30	26 7		6 45	7 3	19 3		6 35	6 53	20 9	
30	Friday ..	7 51	8 4	26 8		7 20	7 38	19 3		7 10	7 28	20 9	
31	Saturday..	8 28	8 36	26 3		7 56	8 13	19 0		7 46	8 3	20 5	

The above are in Greenwich Time, if local Mean Time be required for
 Newport, *sub.* 12m.—Pembroke Dock, *sub.* 20m.—Swansea, *sub.* 15m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 5th, 2h. 43m. p.m. | Last Quarter. 19th, 3h. 12m. a.m.
 Full Moon .. 12th, 6h. 17m. a.m. | New Moon .. 27th, 6h. 54m. a.m.

M. D.	WEEK DAYS.	Equation of Time.	Moon's Tran- sit.	London.		Liverpool.		Barnstaple.			
				Morn.	Even.	Morn.	Even.	Morn.	Even.	Height	
		M. S.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	F. I.	
1	Sunday	2 30	3a 4	4 10	4 27	1 15	1 32	7 46	8 4	25	2
2	Mon ..	2 21	3 50	4 44	5 2	1 50	2 7	8 23	8 42	24	10
3	Tues ..	2 12	4 36	5 20	5 40	2 27	2 47	9 0	9 19	24	6
4	Wednes	2 2	5 21	6 2	6 24	3 8	3 32	9 40	10 2	23	10
5	Thurs..	1 51	6 7	6 48	7 14	3 57	4 25	10 26	10 50	23	1
6	Friday.	1 41	6 54	7 42	8 11	4 55	5 30	11 19	11 47	22	7
7	Satur..	1 30	7 43	8 47	9 23	6 9	6 43	..	0 20	22	9
8	Sunday	1 19	8 37	9 53	10 23	7 14	7 45	0 54	1 31	23	6
9	Mon ..	1 8	9 35	10 55	11 26	8 12	8 45	2 0	2 40	24	9
10	Tues ..	0 56	10 37	11 58	..	9 14	9 41	3 10	3 50	26	2
11	Wednes	0 44	11 42	0 28	0 56	10 7	10 34	4 14	4 51	27	3
12	Thurs..	0 32	morn.	1 24	1 52	11 2	11 29	5 22	5 47	27	11
13	Friday.	0 20	0 47	2 18	2 45	11 55	..	6 12	6 36	28	3
14	Satur..	0 7	1 49	3 10	3 35	0 21	0 46	7 0	7 25	28	3
15	Sunday	0 5	2 47	3 59	4 24	1 12	1 36	7 50	8 13	27	7
16	Mon ..	0 18	3 40	4 48	5 12	1 59	2 23	8 38	9 0	26	9
17	Tues ..	0 31	4 29	5 36	5 59	2 45	3 9	9 20	9 40	25	5
18	Wednes	0 43	5 15	6 25	6 50	3 33	3 57	10 0	10 22	24	3
19	Thurs..	0 56	5 59	7 14	7 38	4 21	4 49	10 44	11 7	22	11
20	Friday.	1 9	6 43	8 5	8 36	5 20	5 52	11 34	..	21	11
21	Satur..	1 22	7 26	9 9	9 39	6 27	7 0	0 9	0 40	21	9
22	Sunday	1 35	8 11	10 10	10 42	7 33	8 3	1 17	1 50	21	8
23	Mon ..	1 48	8 57	11 14	11 46	8 33	9 1	2 27	2 55	22	7
24	Tues ..	2 1	9 45	..	0 14	9 27	9 49	3 30	3 57	23	6
25	Wednes	2 14	10 34	0 41	1 4	10 8	10 20	4 20	4 44	24	3
26	Thurs..	2 27	11 24	1 25	1 48	10 50	11 8	5 5	5 26	25	1
27	Friday.	2 40	0a13	2 7	2 25	11 27	11 47	5 44	6 3	25	7
28	Satur..	2 52	1 1	2 43	3 2	..	0 5	6 20	6 38	25	11
29	Sunday	3 4	1 49	3 19	3 37	0 24	0 41	6 54	7 10	26	1
30	Mon ..	3 16	2 35	3 54	4 10	0 58	1 16	7 27	7 45	26	2

The above are in Greenwich Time, if local Mean Time be required for
 Liverpool, *sub.* 12m.—Barnstaple, *sub.* 17m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 5th, 2h. 43m. p.m. | Last Quarter. 19th, 3h. 12m. a.m.
 Full Moon .. 12th, 6h. 17m. a.m. | New Moon .. 27th, 6h. 54m. a.m.

M. D.	WEEK DAYS.	Bridgwater.					Bristol.					Cardiff.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H.	M.	H.	M.	F.	H.	M.	H.	M.	F.	H.	M.	H.	M.	F.
1	Sunday ..	9	21	9	29	12 6	9	11	9	19	25 1	8	51	9	0	23 10
2	Monday ..	9	57	10	5	12 1	9	47	9	55	24 2	9	26	9	36	23 3
3	Tuesday ..	10	34	10	43	11 8	10	24	10	33	23 1	10	5	10	14	22 5
4	Wednesday ..	11	14	11	25	10 10	11	4	11	15	22 3	10	44	10	55	21 5
5	Thursday ..	11	59	..	..	9 11	11	49	..	..	21 5	11	29	11	53	20 4
6	Friday ..	0	23	1	2	9 3	0	13	0	52	21 1	..	..	0	31	19 7
7	Saturday ..	1	32	2	14	9 6	1	22	2	4	21 8	1	0	1	45	20 0
8	Sunday ..	2	43	3	24	10 5	2	33	3	14	23 0	2	12	2	55	21 1
9	Monday ..	3	53	4	33	12 0	3	43	4	23	24 8	3	21	4	2	22 10
10	Tuesday ..	4	57	5	33	13 9	4	47	5	23	26 8	4	24	5	0	25 1
11	Wednesday ..	6	2	6	33	15 1	5	52	6	23	28 4	5	32	6	4	27 0
12	Thursday ..	7	1	7	28	15 7	6	51	7	18	29 11	6	30	6	58	27 7
13	Friday ..	7	56	8	20	16 4	7	46	8	10	30 5	7	25	7	50	28 6
14	Saturday ..	8	49	9	8	16 4	8	39	8	58	30 6	8	17	8	40	28 8
15	Sunday ..	9	33	9	52	15 6	9	23	9	42	29 8	9	3	9	22	27 10
16	Monday ..	10	17	10	38	14 6	10	7	10	28	28 3	9	50	10	8	26 3
17	Tuesday ..	11	2	11	22	12 10	10	52	11	12	26 6	10	35	10	52	24 4
18	Wednesday ..	11	48	..	..	11 4	11	38	11	59	24 5	11	16	11	40	22 2
19	Thursday ..	0	9	0	30	9 8	..	..	0	20	22 11	12	0	..	..	20 1
20	Friday ..	0	56	1	19	8 5	0	46	1	9	21 7	0	27	0	50	18 4
21	Saturday ..	1	54	2	21	8 2	1	44	2	11	20 6	1	23	1	50	18 3
22	Sunday ..	3	1	3	28	8 0	2	51	3	18	20 5	2	33	2	57	18 2
23	Monday ..	4	6	4	34	9 3	3	56	4	24	21 2	3	37	4	3	19 3
24	Tuesday ..	5	5	5	29	10 5	4	55	5	19	22 8	4	34	5	0	20 9
25	Wednesday ..	5	54	6	15	11 4	5	44	6	5	23 11	5	23	5	44	22 0
26	Thursday ..	6	38	6	53	12 5	6	28	6	43	24 10	6	8	6	25	22 6
27	Friday ..	7	18	7	31	12 8	7	8	7	21	25 9	6	50	7	0	23 7
28	Saturday ..	7	54	8	9	13 5	7	44	7	59	26 6	7	24	7	37	24 8
29	Sunday ..	8	30	8	43	13 8	8	20	8	33	26 9	8	0	8	16	25 3
30	Monday ..	9	8	9	16	13 9	8	58	9	6	26 9	8	38	8	44	25 4

The above are in Greenwich Time, if local Mean Time be required for
 Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.—Cardiff, *sub.* 13m.

For further explanations, see page 3.

D

PHASES OF THE MOON.

First Quarter. 5th, 2h. 43m. p.m. | Last Quarter. 19th, 3h. 12m. a
 Full Moon .. 12th, 6h. 17m. a.m. | New Moon .. 27th, 6h. 54m. a

M. D.	WEEK DAYS.	Gloucester.					Ilfracombe.					Llanelly.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		He
		H. M.	H. M.	F. I.			H. M.	H. M.	F. I.			H. M.	H. M.	F. I.		
1	Sunday ..	10 11	10 18	24 6			7 56	8 14	18 9			8 30	8 48	19		
2	Monday..	10 35	10 52	23 10			8 33	8 52	18 5			9 7	9 26	18		
3	Tuesday..	11 10	11 27	22 9			9 10	9 29	18 0			9 44	10 3	18		
4	Wednesday	11 45	..	21 6			9 50	10 12	17 4			10 24	10 46	17		
5	Thursday..	0 6	0 30	20 2			10 36	11 0	16 6			11 10	11 34	17		
6	Friday ..	0 56	1 28	19 3			11 29	11 57	15 11			..	0 3	16		
7	Saturday..	2 0	2 32	19 9			..	0 30	16 2			0 31	1 4	16		
8	Sunday ..	3 3	3 35	21 1			1 4	1 41	16 11			1 38	2 15	17		
9	Monday..	4 7	4 45	23 3			2 19	2 50	18 4			2 45	3 21	18		
10	Tuesday..	5 22	5 57	26 1			3 20	4 0	19 10			3 54	4 30	20		
11	Wednesday	6 29	7 1	27 8			4 24	5 1	21 0			5 0	5 35	21		
12	Thursday..	7 32	8 0	29 3			5 32	5 57	21 5			6 6	6 31	21		
13	Friday ..	8 28	8 53	30 4			6 22	6 46	22 1			6 56	7 20	22		
14	Saturday..	9 18	9 42	30 7			7 11	7 35	22 1			7 45	8 9	22		
15	Sunday ..	10 5	10 27	29 6			8 0	8 23	21 4			8 33	8 57	21		
16	Monday..	10 49	11 8	27 7			8 48	9 9	20 6			9 22	9 43	21		
17	Tuesday..	11 27	11 47	25 2			9 30	9 50	19 1			10 4	10 24	19		
18	Wednesday	..	0 6	22 5			10 11	10 32	17 9			10 45	11 6	18		
19	Thursday..	0 26	0 50	19 10			10 54	11 17	16 3			11 28	11 53	16		
20	Friday ..	1 18	1 47	17 8			11 44	..	15 2			..	0 18	15		
21	Saturday..	2 18	2 49	17 7			0 19	0 50	15 0			0 53	1 24	15		
22	Sunday ..	3 22	3 55	17 5			1 27	2 0	14 10			2 1	2 32	15		
23	Monday..	4 31	5 4	18 10			2 37	3 5	15 11			3 11	3 40	16		
24	Tuesday..	5 38	6 6	20 8			3 40	4 7	16 11			4 14	4 41	17		
25	Wednesday	6 30	6 57	21 5			4 30	4 54	17 9			5 4	5 28	18		
26	Thursday..	7 19	7 40	22 10			5 15	5 36	18 8			5 49	6 10	19		
27	Friday ..	8 0	8 20	24 3			5 54	6 13	18 11			6 28	6 47	19		
28	Saturday..	8 37	8 56	25 7			6 30	6 48	19 7			7 4	7 22	20		
29	Sunday ..	9 13	9 29	26 4			7 4	7 20	19 9			7 38	7 54	20		
30	Monday..	9 46	10 2	26 5			7 37	7 55	19 10			8 11	8 29	20		

The above are in Greenwich Time, if local Mean Time be required for
 Gloucester, *sub.* 10m.—Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 5th, 2h. 43m. p.m. | Last Quarter.. 19th, 1h. 12m. a.m.
 Full Moon .. 12th, 6h. 17m. a.m. | New Moon .. 27th, 6h. 54m. a.m.

M. D.	WEEK DAYS	Newport.				Pembroke Dock.				Swansea.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Sunday ..	9	1	9	9	26	3	8	31	8	49	18	8
2	Monday..	9	36	9	46	25	2	9	7	9	27	18	4
3	Tuesday..	10	15	10	24	24	3	9	46	10	6	18	0
4	Wednesday	10	54	11	5	23	1	10	27	10	49	17	4
5	Thursday..	11	39	..	21	11	11	11	12	11	35	16	7
6	Friday ..	0	3	0	41	21	0	..	0	3	16	1	11
7	Saturday..	1	11	1	55	21	6	0	34	1	3	16	3
8	Sunday ..	2	22	3	5	22	9	1	37	2	12	17	0
9	Monday..	3	31	4	12	24	9	2	45	3	20	18	3
10	Tuesday..	4	34	5	11	27	4	3	54	4	27	19	8
11	Wednesday	5	42	6	14	29	6	4	58	5	31	20	9
12	Thursday..	6	40	7	8	30	2	6	1	6	29	21	2
13	Friday ..	7	35	8	0	31	3	6	54	7	20	21	9
14	Saturday..	8	27	8	50	31	5	7	45	8	10	21	9
15	Sunday ..	9	13	9	32	30	6	8	35	8	59	21	1
16	Monday..	10	0	10	18	28	7	9	23	9	44	20	3
17	Tuesday..	10	45	11	2	26	6	10	7	10	29	18	11
18	Wednesday	11	26	11	50	23	11	10	49	11	10	17	9
19	Thursday..	..	0	10	21	7	11	11	30	11	54	16	5
20	Friday ..	0	37	1	0	19	7	..	0	20	15	5	11
21	Saturday..	1	33	2	0	19	5	0	50	1	22	15	3
22	Sunday ..	2	43	3	7	19	4	1	57	2	32	15	2
23	Monday..	3	47	4	13	20	7	3	8	3	39	16	1
24	Tuesday..	4	44	5	9	22	4	4	10	4	36	17	0
25	Wednesday	5	33	5	54	23	9	4	59	5	26	17	9
26	Thursday..	6	18	6	35	24	4	5	48	6	8	18	7
27	Friday ..	7	0	7	10	25	7	6	27	6	46	18	10
28	Saturday..	7	34	7	47	26	10	7	4	7	23	19	5
29	Sunday ..	8	11	8	26	27	6	7	40	7	56	19	7
30	Monday..	8	48	8	54	27	7	8	14	8	32	19	8

The above are in Greenwich Time, if local Mean Time be required for
 Newport, *sub.* 12m.—Pembroke Dock, *sub.* 20m.—Swansea, *sub.* 15 m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 4th, 10h. 51m. p.m. | Last Quarter.. 18th, 5h. 13m. p.
 Full Moon .. 11th, 1h. 38m. p.m. | New Moon .. 26th, 9h. 5m. p.

M. D.	WEEK DAYS.	Equation of Time.	Moon's Trans- sit.	London.		Liverpool.		Barnstaple.		
				Morn.	Even.	Morn.	Even.	Morn.	Even.	Hei
		M. S.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	F.
1	Tues ..	3 28	3a20	4 28	4 45	1 33	1 52	8 4	8 23	26
2	Wednes	3 40	4 4	5 4	5 23	2 10	2 30	8 41	9 0	25
3	Thurs..	3 51	4 50	5 43	6 2	2 47	3 9	9 18	9 38	24
4	Friday.	4 2	5 37	6 25	6 48	3 32	3 55	10 0	10 21	24
5	Satur..	4 13	6 28	7 12	7 37	4 20	4 49	10 44	11 7	23
6	Sunday	4 23	7 22	8 5	8 35	5 19	5 55	11 31	..	22
7	Mon ..	4 33	8 20	9 11	9 48	6 37	7 15	0 15	0 57	22
8	Tues ..	4 42	9 22	10 24	11 1	7 50	8 25	1 34	2 14	23
9	Wednes	4 51	10 26	11 37	..	8 58	9 30	2 50	3 30	25
10	Thurs..	5 0	11 29	0 11	0 44	9 57	10 25	4 0	4 40	26
11	Friday.	5 8	morn.	1 13	1 43	10 52	11 20	5 10	5 36	28
12	Satur..	5 16	0 30	2 9	2 36	11 47	..	6 0	6 25	28
13	Sunday	5 23	1 26	3 2	3 36	0 12	0 36	6 50	7 11	28
14	Mon ..	5 30	2 18	3 49	4 11	1 0	1 19	7 32	7 52	28
15	Tues ..	5 37	3 6	4 31	4 53	1 41	2 2	8 13	8 38	27
16	Wednes	5 43	3 53	5 15	5 35	2 22	2 41	8 51	9 9	26
17	Thurs.	5 48	4 38	5 55	6 15	3 0	3 19	9 28	9 46	25
18	Friday.	5 53	5 22	6 35	6 56	3 39	4 0	10 5	10 24	23
19	Satur..	5 58	6 7	7 17	7 41	4 24	4 51	10 43	11 13	22
20	Sunday	6 1	6 53	8 7	8 39	5 23	5 57	11 44	..	21
21	Mon ..	6 5	7 41	9 13	9 49	6 39	7 16	0 29	1 0	21
22	Tues ..	6 8	8 29	10 25	11 2	7 51	8 27	1 38	2 16	21
23	Wednes	6 10	9 18	11 39	..	8 57	9 24	2 50	3 28	22
24	Thurs..	6 12	10 8	0 10	0 38	9 47	10 8	3 54	4 20	23
25	Friday.	6 13	10 57	1 2	1 25	10 28	10 50	4 42	5 5	24
26	Satur..	6 13	11 45	1 46	2 7	11 9	11 26	5 24	5 43	25
27	Sunday	6 13	0a32	2 25	2 42	11 44	..	6 0	6 17	26
28	Mon ..	6 13	1 18	2 59	3 17	0 3	0 20	6 34	6 51	26
29	Tues ..	6 12	2 3	3 34	3 50	0 35	0 54	7 7	7 23	26
30	Wednes	6 9	2 49	4 6	4 23	1 11	1 29	7 41	8 0	27
31	Thurs..	6 7	3 36	4 41	5 0	1 48	2 5	8 18	8 37	26

The above are in Greenwich Time, if local Mean Time be required for
 Liverpool, *sub.* 12m.—Barnstaple, *sub.* 17m

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 4th, 10h. 51m. p.m. | Last Quarter.. 18th, 5h. 13m. p.m.
 Full Moon .. 11th, 1h. 38m. p.m. | New Moon .. 26th, 9h. 5m. p.m.

M. D.	WEEK DAYS.	Bridgwater.						Bristol.						Cardiff.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	P.	I.	H.	M.	H.	M.	P.	I.	H.	M.	H.	M.	P.	I.
1	Tuesday..	9	44	9	55	13	8	9	84	9	45	26	5	9	13	9	26	25	4
2	Wednesday	10	22	10	33	13	0	10	12	10	23	25	8	9	51	10	2	24	10
3	Thursday..	11	0	11	11	12	1	10	50	11	1	24	10	10	29	10	40	23	7
4	Friday ..	11	39	11	57	11	2	11	29	11	47	23	8	11	8	11	26	22	3
5	Saturday..	..		0	28	10	0	..		0	18	22	7	11	57	..		20	8
6	Sunday ..	0	54	1	31	9	4	0	44	1	21	22	1	0	25	1	0	19	8
7	Monday..	2	2	2	44	9	8	1	52	2	34	22	1	1	32	2	13	20	0
8	Tuesday..	3	20	4	5	10	9	3	10	3	55	23	3	2	50	3	34	21	2
9	Wednesday	4	40	5	20	12	5	4	30	5	10	25	0	4	8	4	50	23	3
10	Thursday..	5	46	6	19	14	4	5	36	6	9	27	2	5	15	5	50	26	0
11	Friday ..	6	50	7	16	16	0	6	40	7	6	29	0	6	19	6	46	27	3
12	Saturday..	7	48	8	9	16	8	7	38	7	59	30	1	7	17	7	36	28	7
13	Sunday ..	8	38	8	56	17	2	8	28	8	46	30	8	8	8	8	27	29	6
14	Monday..	9	21	9	36	16	4	9	11	9	26	30	4	8	50	9	5	28	10
15	Tuesday..	10	1	10	16	15	5	9	51	10	6	29	2	9	30	9	50	27	10
16	Wednesday	10	38	10	53	14	2	10	28	10	43	27	4	10	10	10	24	26	2
17	Thursday..	11	12	11	27	12	3	11	2	11	17	25	4	10	41	10	57	24	0
18	Friday ..	11	43	..		10	7	11	33	11	54	22	9	11	13	11	33	21	5
19	Saturday..	0	4	0	20	9	2	..		0	10	21	0	11	48	..		19	0
20	Sunday ..	0	49	1	8	7	9	0	39	0	58	19	5	0	19	0	38	17	6
21	Monday..	1	54	2	24	7	2	1	44	2	14	18	3	1	23	1	53	16	9
22	Tuesday..	3	19	3	47	7	10	3	9	3	37	19	0	2	50	3	16	17	6
23	Wednesday	4	32	4	56	9	2	4	22	4	46	20	8	4	0	4	25	19	0
24	Thursday..	5	29	5	51	10	6	5	19	5	41	22	7	5	0	5	20	21	0
25	Friday ..	6	18	6	35	11	10	6	8	6	25	24	5	5	47	6	4	21	10
26	Saturday..	7	1	7	14	12	7	6	51	7	4	26	1	6	30	6	43	23	1
27	Sunday ..	7	40	7	51	13	8	7	30	7	41	27	2	7	9	7	21	24	4
28	Monday..	8	15	8	28	14	2	8	5	8	18	28	0	7	44	7	58	25	8
29	Tuesday..	8	52	9	4	14	8	8	42	8	54	28	7	8	21	8	34	26	6
30	Wednesday	9	26	9	37	14	9	9	16	9	27	28	6	9	0	9	7	26	5
31	Thursday..	10	0	10	15	14	4	9	50	10	5	27	9	9	30	9	44	26	4

The above are in Greenwich Time, if local Mean Time be required for
 Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.—Cardiff, *sub.* 13m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 4th, 10h. 51m. p.m. | Last Quarter.. 18th, 5h. 13m. p.m.
 Full Moon .. 11th, 1h. 38m. p.m. | New Moon .. 28th, 9h. 5m. p.m.

M.	WEEK DATA.	Newport.				Pembroke Dock.				Swansea.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Tuesday..	9	23	9	36	27	7	8	51	9	10	19	7
2	Wednesday	10	1	10	12	27	0	9	30	9	46	19	1
3	Thursday..	10	39	10	50	25	7	10	7	10	27	18	4
4	Friday ..	11	18	11	36	24	0	10	48	11	8	17	7
5	Saturday..	..	0	7	22	3	11	30	11	53	16	8	11
6	Sunday ..	0	35	1	10	21	1	..	0	23	16	2	..
7	Monday..	1	42	2	23	21	6	0	58	1	38	16	5
8	Tuesday..	3	0	3	44	22	10	2	18	2	58	17	3
9	Wednesday	4	18	5	0	25	2	3	35	4	13	18	7
10	Thursday..	5	25	6	0	28	3	4	47	5	20	20	2
11	Friday ..	6	29	6	56	29	9	5	50	6	20	21	0
12	Saturday..	7	27	7	46	31	4	6	46	7	11	22	0
13	Sunday ..	8	18	8	37	32	5	7	35	7	57	22	5
14	Monday..	9	0	9	15	31	8	8	17	8	40	21	9
15	Tuesday..	9	40	10	0	30	6	9	2	9	22	21	0
16	Wednesday	10	20	10	34	28	6	9	40	9	58	20	0
17	Thursday..	10	51	11	7	26	0	10	16	10	34	18	6
18	Friday ..	11	23	11	43	23	1	10	52	11	12	17	2
19	Saturday..	11	58	..	20	4	11	32	11	57	16	0	11
20	Sunday ..	0	29	0	48	18	7	..	0	25	14	11	..
21	Monday..	1	33	2	3	17	8	0	59	1	39	14	6
22	Tuesday..	3	0	3	26	18	7	2	19	3	0	15	0
23	Wednesday	4	11	4	35	20	4	3	34	4	6	16	0
24	Thursday..	5	9	5	30	22	8	4	34	4	59	17	1
25	Friday ..	5	57	6	14	23	7	5	24	5	48	18	2
26	Saturday..	6	40	6	53	25	0	6	8	6	26	18	9
27	Sunday ..	7	19	7	31	26	6	6	43	7	2	19	7
28	Monday..	7	54	8	8	27	11	7	20	7	36	20	0
29	Tuesday..	8	31	8	44	28	11	7	52	8	10	20	5
30	Wednesday	9	9	9	17	29	0	8	27	8	47	20	6
31	Thursday..	9	40	9	54	28	9	9	5	9	23	20	2

The above are in Greenwich Time, if local Mean Time be required for
 Newport, sub. 12m.—Pembroke Dock, sub. 20m.—Swansea, sub. 15m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 3rd, 4h. 56m. a.m. | Last Quarter.. 17th, 9h. 47m. a.
 Full Moon .. 9th, 9h. 53m. p.m. | New Moon .. 25th, 9h. 40m. a.

M. D.	WEEK DAYS.	Equation of Time.	Moon's Tran- sit.	London.		Liverpool.		Barnstaple.		
				Morn.	Even.	Morn.	Even.	Morn.	Even.	Hel.
		M. S.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	P.
1	Friday.	6 4	4a25	5 18	5 37	2 24	2 42	8 56	9 16	26
2	Satur..	6 0	5 16	5 56	6 18	3 3	3 25	9 36	9 56	25
3	Sunday	5 56	6 12	6 41	7 7	3 50	4 17	10 21	10 47	24
4	Mon ..	5 51	7 10	7 34	8 4	4 48	5 25	11 4	11 50	23
5	Tues ..	5 45	8 11	8 41	9 24	6 10	6 58	..	0 41	22
6	Wednes	5 39	9 13	10 8	10 51	7 41	8 23	1 23	2 10	23
7	Thurs..	5 32	10 14	11 35	..	8 58	9 30	2 51	3 26	24
8	Friday.	5 25	11 11	0 11	0 44	9 56	10 23	4 0	4 30	26
9	Satur..	5 17	morn	1 12	1 40	10 46	11 10	5' 0	5 23	27
10	Sunday	5 8	0 5	2 3	2 26	11 32	11 53	5 47	6 8	28
11	Mon ..	4 59	0 55	2 48	3 8	..	0 15	6 30	6 48	28
12	Tues ..	4 49	1 43	3 29	3 48	0 35	0 55	7 7	7 26	28
13	Wednes	4 39	2 30	4 7	4 27	1 15	1 33	7 46	8 3	27
14	Thurs..	4 28	3 15	4 45	5 2	1 50	2 7	8 21	8 38	26
15	Friday.	4 17	4 1	5 20	5 37	2 24	2 43	8 55	9 12	25
16	Satur..	4 5	4 47	5 56	6 14	2 59	3 18	9 29	9 47	23
17	Sunday	3 53	5 34	6 34	6 54	3 37	4 0	10 5	10 30	22
18	Mon ..	3 40	6 23	7 17	7 45	4 28	5 0	10 55	11 27	20 1
19	Tues ..	3 27	7 12	8 16	8 55	5 38	6 25	12 0	..	20
20	Wednes	3 13	8 1	9 37	10 18	7 9	7 49	0 47	1 35	20
21	Thurs..	2 59	8 50	10 59	11 37	8 25	8 57	2 14	2 54	22
22	Friday.	2 44	9 39	..	0 10	9 22	9 45	3 21	3 48	23
23	Satur..	2 29	10 26	0 36	1 0	10 6	10 24	4 11	4 35	25
24	Sunday	2 13	11 13	1 22	1 41	10 41	11 0	4 56	5 16	26
25	Mon ..	1 57	11 59	1 59	2 16	11 17	11 33	5 33	5 51	27
26	Tues ..	1 41	0a46	2 33	2 49	11 53	..	6 8	6 26	27
27	Wednes	1 24	1 33	3 8	3 26	0 12	0 29	6 44	7 2	27 1
28	Thurs..	1 7	2 22	3 42	3 59	0 46	1 4	7 19	7 36	27 1
29	Friday.	0 49	3 13	4 16	4 36	1 24	1 41	7 54	8 15	27
30	Satur..	0 32	4 8	4 53	5 13	2 0	2 20	8 36	8 56	26
31	Sunday	0 13	5 5	5 33	5 54	2 40	3 2	9 18	9 40	25

The above are in Greenwich Time, if local Mean Time be required for
 Liverpool, *sub.* 12m — Barnstaple, *sub.* 17m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 3rd, 4h. 56m. a.m. | Last Quarter. 17th, 9h. 47m. a.m.
 Full Moon .. 9th, 9h. 53m. p.m. | New Moon .. 25th, 9h. 40m. a.m.

WEEK DAYS	Bridgwater.						Bristol.						Cardiff.					
	Morn.	Even.	Height				Morn.	Even.	Height				Morn.	Even.	Height			
	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1 Friday ..	10	37	10	49	13	6	10	27	10	39	26	9	10	10	10	20	25	4
2 Saturday..	11	10	11	32	12	3	11	0	11	22	25	1	10	50	11	0	23	7
3 Sunday ..	..	0	2	11	2		11	52	..	23	9		11	31	11	53	22	0
4 Monday ..	0	23	0	58	9	9	0	13	0	48	22	4	..	0	30	20		3
5 Tuesday ..	1	35	2	20	9	3	1	25	2	10	20	11	1	5	1	50	19	8
6 Wednesday	3	3	3	52	10	4	2	53	3	42	21	10	2	32	3	24	20	11
7 Thursday..	4	32	5	10	12	3	4	22	5	0	24	2	4	0	4	40	23	0
8 Friday ..	5	43	6	12	13	11	5	33	6	2	26	10	5	12	5	41	25	6
9 Saturday..	6	42	7	10	15	9	6	32	7	0	29	1	6	15	6	40	26	9
10 Sunday ..	7	34	7	57	16	5	7	24	7	47	30	6	7	8	7	31	28	0
11 Monday ..	8	20	8	42	16	3	8	10	8	32	31	1	7	50	8	10	28	9
12 Tuesday ..	8	57	9	14	16	3	8	47	9	4	30	9	8	23	8	43	28	6
13 Wednesday	9	30	9	46	15	5	9	20	9	36	29	9	9	5	9	16	27	6
14 Thursday..	10	2	10	20	14	1	9	52	10	10	27	10	9	44	9	50	25	11
15 Friday ..	10	30	10	47	12	5	10	20	10	37	25	8	10	0	10	17	23	10
16 Saturday..	11	0	11	20	10	9	10	50	11	10	23	0	10	30	10	50	21	9
17 Sunday ..	11	27	11	52	9	3	11	17	11	42	20	1	10	57	11	22	19	6
18 Monday ..	..	0	6	7	1		11	56	..	18	1		11	36	..		17	0
19 Tuesday ..	0	53	1	20	6	3	0	43	1	10	16	7	0	24	0	50	16	0
20 Wednesday	2	26	2	56	6	9	2	16	2	46	16	7	1	56	2	26	16	7
21 Thursday..	3	56	4	20	8	8	3	46	4	10	19	1	3	26	3	50	18	7
22 Friday ..	5	2	5	23	10	7	4	52	5	13	21	11	4	36	4	53	20	10
23 Saturday..	5	55	6	13	12	3	5	45	6	3	24	7	5	25	5	42	22	11
24 Sunday ..	6	39	6	54	13	11	6	29	6	44	26	8	6	10	6	23	24	1
25 Monday ..	7	17	7	33	14	7	7	7	7	23	28	5	6	50	7	2	26	2
26 Tuesday ..	7	53	8	11	15	7	7	43	8	1	29	7	7	23	7	41	27	6
27 Wednesday	8	30	8	46	15	11	8	20	8	36	30	1	8	0	8	18	27	11
28 Thursday..	9	5	9	18	15	10	8	55	9	8	30	1	8	36	8	50	27	10
29 Friday ..	9	41	9	53	15	5	9	31	9	43	29	4	9	10	9	23	27	6
30 Saturday..	10	14	10	30	14	4	10	4	10	20	27	11	9	44	10	0	26	3
31 Sunday ..	10	51	11	13	12	10	10	41	11	3	25	8	10	21	10	45	24	4

The above are in Greenwich Time, if local Mean Time be required for
 Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.—Cardiff, *sub.* 13m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 1st, 10h. 18m. a.m. | New Moon .. 23rd, 8h. 57m. p.m.
 Full Moon .. 8th, 7h. 57m. a.m. | First Quarter. 30th, 4h. 10m. p.m.
 Last Quarter.. 16th, 4h. 22m. a.m.

M. D.	WEEK DAYS.	Equation of Time.	Moon's Trans- sit.	London.		Liverpool.		Barnstaple.		
				Morn.	Even.	Morn.	Even.	Morn.	Even.	Heig.
		M. S.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	F.
1	Mon ..	0 5	6a 4	6 17	6 44	3 28	3 57	10 5	10 31	24
2	Tues ..	0 24	7 5	7 14	7 48	4 31	5 12	11 5	11 39	22
3	Wednes	0 43	8 4	8 28	9 12	5 56	6 50	..	0 28	22
4	Thurs..	1 3	9 1	10 0	10 46	7 37	8 15	1 17	2 0	23
5	Friday.	1 23	9 54	11 27	..	8 50	9 20	2 43	3 16	24
6	Satur..	1 43	10 45	0 3	0 34	9 45	10 9	3 48	4 14	26
7	Sunday	2 3	11 34	1 0	1 26	10 30	10 51	4 40	5 3	27
8	Mon ..	2 23	morn.	1 48	2 8	11 10	11 29	5 27	5 46	28
9	Tues ..	2 44	0 21	2 26	2 45	11 48	..	6 5	6 23	28
10	Wednes	3 4	1 7	3 3	3 22	0 8	0 27	6 41	6 58	28
11	Thurs..	3 25	1 53	3 40	3 56	0 43	1 1	7 16	7 33	27
12	Friday.	3 46	2 40	4 13	4 30	1 18	1 34	7 50	8 7	26
13	Satur..	4 7	3 27	4 46	5 2	1 50	2 6	8 24	8 41	25
14	Sunday	4 28	4 15	5 19	5 35	2 22	2 40	9 0	9 16	23
15	Mon ..	4 49	5 4	5 54	6 15	3 0	3 21	9 34	9 55	22
16	Tues ..	5 10	5 53	6 37	7 3	3 46	4 15	10 16	10 47	22
17	Wednes	5 32	6 42	7 32	8 8	4 52	5 34	11 18	..	20
18	Thurs ..	5 53	7 30	8 51	9 33	6 20	7 6	0 3	0 48	21
19	Friday.	6 14	8 18	10 15	10 57	7 47	8 21	1 26	2 6	21
20	Satur..	6 35	9 5	11 33	..	8 49	9 13	2 35	3 8	23
21	Sunday	6 56	9 51	0 2	0 27	9 33	9 52	3 32	3 56	25
22	Mon ..	7 17	10 38	0 48	1 8	10 11	10 28	4 18	4 40	26
23	Tues ..	7 37	11 26	1 28	1 46	10 47	11 6	5 0	5 21	27
24	Wednes	7 58	0a15	2 4	2 22	11 23	11 42	5 39	5 57	28
25	Thurs..	8 18	1 7	2 39	2 57	12 0	..	6 17	6 37	28
26	Friday.	8 39	2 1	3 15	3 34	0 20	0 41	6 57	7 17	28
27	Satur..	8 59	2 59	3 54	4 13	1 0	1 20	7 38	8 0	27
28	Sunday	9 19	3 59	4 32	4 53	1 41	2 1	8 22	8 45	26
29	Mon ..	9 39	4 59	5 14	5 38	2 25	2 48	9 8	9 31	25
30	Tues ..	9 58	5 59	6 3	6 32	3 16	3 46	9 58	10 25	23

The above are in Greenwich Time, if local Mean Time be required for
 Liverpool, *sub.* 12m — Barnstaple, *sub.* 17m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 1st, 10h. 18m. a.m. | New Moon .. 23rd, 8h. 57m. p.m.
 Full Moon .. 8th, 7h. 57m. a.m. | First Quarter. 30th, 4h. 10m. p.m.
 Last Quarter.. 16th, 4h. 22m. a.m.

WEEK DAYS	Bridgwater.				Bristol.				Cardiff.			
	Morn.		Even.		Height		Morn.		Even.		Height	
	H.	M.	H.	M.	P.	I.	H.	M.	H.	M.	P.	I.
Monday..	11	28	..	..	11	0	11	18	11	52	22	11
Tuesday..	0	2	0	31	9	4	..	0	21	20	10	..
Wednesday..	1	20	2	5	8	10	1	10	1	55	19	10
Thursday..	2	59	3	47	10	0	2	49	3	37	21	2
Friday..	4	27	5	4	12	0	4	17	4	54	24	0
Saturday..	5	34	6	3	13	11	5	24	5	53	26	9
Sunday..	6	29	6	53	15	5	6	19	6	43	28	11
Monday..	7	15	7	36	16	0	7	5	7	26	30	4
Tuesday..	7	54	8	14	16	4	7	44	8	43	30	9
Wednesday..	8	29	8	46	16	0	8	19	8	36	30	5
Thursday..	9	0	9	14	15	1	8	49	9	42	29	4
Friday..	9	27	9	42	13	10	9	17	9	32	27	11
Saturday..	9	56	10	14	12	10	9	46	10	42	25	10
Sunday..	10	22	10	40	10	9	10	12	10	30	23	1
Monday..	10	46	11	12	9	6	10	36	11	22	20	2
Tuesday..	11	18	12	0	8	10	11	8	11	50	17	3
Wednesday..	..	0	23	6	5	..	..	0	13	16	0	11
Thursday..	1	29	2	10	7	2	1	19	2	0	16	0
Friday..	3	15	3	43	8	0	3	5	3	33	18	4
Saturday..	4	28	4	49	10	6	4	18	4	39	21	7
Sunday..	5	24	5	39	12	6	5	14	5	29	24	7
Monday..	6	12	6	24	14	3	6	2	6	14	27	1
Tuesday..	6	52	7	8	15	10	6	42	6	58	29	0
Wednesday..	7	32	7	46	16	0	7	22	7	36	30	6
Thursday..	8	10	8	23	16	8	8	0	8	13	31	5
Friday..	8	44	9	0	16	8	8	34	8	50	31	5
Saturday..	9	21	9	36	15	7	9	11	9	26	30	5
Sunday..	9	57	10	16	14	6	9	47	10	6	28	7
Monday..	10	38	11	0	12	10	10	28	10	49	25	11
Tuesday..	11	24	11	52	10	9	11	14	11	42	22	10

The above are in Greenwich Time, if local Mean Time be required for
 Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.—Cardiff, *sub.* 13m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 1st, 10h. 18m. a.m. | New Moon .. 23rd, 8h. 57m.
 Full Moon .. 8th, 7h. 57m. a.m. | First Quarter. 30th, 4h. 10m.
 Last Quarter.. 16th, 4h. 22m. a.m.

M. D.	WEEK DAYS.	Gloucester.					Ilfracombe.					Llanelly.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		
		H.	M.	H.	M.	F.	H.	M.	H.	M.	F.	H.	M.	H.	M.	F.
1	Monday..	..	0	6	22	0	10	15	10	41	17	5	10	49	11	15
2	Tuesday..	0	35	1	11	19	5	11	15	11	49	16	0	11	49	..
3	Wednesday	1	50	2	39	18	8	..	0	38	15	7	0	23	1	12
4	Thursday..	3	26	4	9	20	3	1	27	2	9	16	7	2	0	2
5	Friday ..	4	51	5	29	23	2	2	53	3	26	18	4	3	27	4
6	Saturday..	6	2	6	31	24	9	3	58	4	24	20	0	4	32	4
7	Sunday ..	6	57	7	20	27	9	4	50	5	13	21	4	5	24	5
8	Monday..	7	41	8	1	29	9	5	37	5	56	21	10	6	11	6
9	Tuesday..	8	21	8	40	30	3	6	15	6	33	22	1	6	49	7
10	Wednesday	9	0	9	15	29	10	6	51	7	8	21	10	7	25	7
11	Thursday..	9	32	9	48	28	6	7	26	7	43	21	0	8	0	8
12	Friday ..	10	3	10	18	26	9	8	0	8	17	19	11	8	34	8
13	Saturday..	10	34	10	48	24	10	8	34	8	51	19	1	9	8	9
14	Sunday ..	11	3	11	20	21	9	9	9	9	26	17	3	9	43	10
15	Monday..	11	36	11	57	19	0	9	44	10	5	16	2	10	18	10
16	Tuesday..	..	0	2	16	11	10	10	26	10	57	15	7	11	0	11
17	Wednesday	0	53	1	31	14	10	11	28	..	13	5	..	..	0	21
18	Thursday..	2	12	2	55	15	11	0	13	0	58	14	1	0	47	1
19	Friday ..	3	37	4	16	17	7	1	36	2	16	14	10	2	10	2
20	Saturday..	4	50	5	21	20	11	2	45	3	18	17	0	3	21	3
21	Sunday ..	5	47	6	11	23	10	3	42	4	6	18	9	4	16	4
22	Monday..	6	34	6	55	25	4	4	28	4	50	20	3	5	2	5
23	Tuesday..	7	16	7	36	28	1	5	10	5	31	21	8	5	44	6
24	Wednesday	7	55	8	14	29	9	5	49	6	7	21	10	6	23	6
25	Thursday..	8	33	8	52	30	8	6	27	6	47	22	5	7	0	7
26	Friday ..	9	13	9	32	30	9	7	7	7	27	22	5	7	41	8
27	Saturday..	9	50	10	10	29	4	7	48	8	9	21	5	8	22	8
28	Sunday ..	10	29	10	50	27	8	8	32	8	55	20	6	9	6	9
29	Monday..	11	10	11	33	25	3	9	18	9	41	19	1	9	52	10
30	Tuesday..	11	57	..	21	11	10	10	8	10	35	17	3	10	42	11

The above are in Greenwich Time, if local Mean Time be required
 Glo'ster, *sub.* 10m.—Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 1

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 1st, 10h. 18m. a.m.

New Moon .. 23rd, 8h. 57m. p.m.

Full Moon .. 8th, 7h. 57m. a.m.

First Quarter. 30th, 4h. 10m. p.m.

Last Quarter.. 16th, 4h. 22m. a.m.

M. D.	WEEK DAYS.	Newport.					Pembroke Dock.					Swansea.				
		Morn.	Even.	Height			Morn.	Even.	Height			Morn.	Even.	Height		
		H. M.	H. M.	F. I.			H. M.	H. M.	F. I.			H. M.	H. M.	F. I.		
1	Monday..	11 18	11 42	23 7			10 49	11 17	17 6			10 39	11 7	18 6		
2	Tuesday..	..	0 13	21 2			11 48	..	16 2			11 38	..	16 10		
3	Wednesday	1 0	1 45	20 6			0 24	1 17	15 9			0 14	1 1	16 4		
4	Thursday..	2 39	3 30	22 0			2 2	2 46	16 8			1 52	2 36	17 6		
5	Friday ..	4 7	4 42	24 7			3 26	4 1	18 3			3 16	3 51	19 6		
6	Saturday..	5 14	5 45	27 5			4 32	5 1	19 10			4 22	4 51	21 5		
7	Sunday ..	6 9	6 29	28 10			5 26	5 49	21 0			5 16	5 39	22 11		
8	Monday..	6 56	7 17	30 8			6 8	6 29	21 6			5 58	6 19	23 6		
9	Tuesday..	7 38	7 54	31 2			6 47	7 7	21 9			6 37	6 57	23 10		
10	Wednesday	8 10	8 25	30 9			7 26	7 42	21 6			7 16	7 32	23 6		
11	Thursday..	8 42	9 0	29 6			7 59	8 16	20 9			7 49	8 6	22 7		
12	Friday ..	9 7	9 22	27 10			8 33	8 49	19 9			8 23	8 39	21 4		
13	Saturday..	9 37	9 53	26 2			9 6	9 22	18 11			8 56	9 12	20 4		
14	Sunday ..	10 2	10 20	23 3			9 39	9 58	17 3			9 29	9 48	18 3		
15	Monday..	10 26	10 50	20 10			10 18	10 40	16 3			10 8	10 30	17 0		
16	Tuesday..	10 57	11 40	18 10			11 4	11 32	15 9			10 54	11 22	16 4		
17	Wednesday	..	0 3	17 0			..	0 6	13 11			11 56	..	13 11		
18	Thursday..	1 9	1 49	17 11			0 44	1 27	14 6			0 34	1 17	14 8		
19	Friday ..	2 54	3 23	19 5			2 14	2 53	15 2			2 4	2 43	15 6		
20	Saturday..	4 8	4 29	22 7			3 25	3 53	17 1			3 15	3 43	18 0		
21	Sunday ..	5 4	5 19	25 2			4 17	4 42	18 8			4 7	4 32	20 0		
22	Monday..	5 51	6 4	28 0			5 3	5 24	20 1			4 53	5 14	21 9		
23	Tuesday..	6 32	6 48	29 1			5 44	6 5	21 4			5 34	5 55	23 4		
24	Wednesday	7 12	7 26	30 8			6 23	6 41	21 6			6 13	6 31	23 6		
25	Thursday..	7 49	8 3	31 6			7 0	7 20	22 0			6 50	7 9	24 2		
26	Friday ..	8 24	8 40	31 8			7 40	8 0	22 0			7 30	7 50	24 2		
27	Saturday..	9 1	9 16	30 3			8 18	8 40	21 2			8 8	8 30	23 1		
28	Sunday ..	9 35	9 56	28 9			9 1	9 25	20 3			8 51	9 15	22 9		
29	Monday..	10 18	10 39	26 7			9 47	10 13	18 11			9 37	10 3	20 4		
30	Tuesday..	11 4	11 32	23 5			10 40	11 12	17 3			10 30	11 2	18 3		

The above are in Greenwich Time, if local Mean Time be required for
 Newport, *sub.* 12m.—Pembroke Dock, *sub.* 20m.—Swansea, *sub.* 15 m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 7th, 8h. 46m. p.m. | New Moon .. 23rd, 7h. 37m. a.m.
 Last Quarter. 15th, 11h. 42m. p.m. | First Quarter. 29th, 11h. 44m. p.m.

M. D.	WEEK DAYS.	Equation of Time.	Moon's Trans- sit.	London.		Liverpool.		Barnstaple.			
				Morn.	Even.	Morn.	Even.	Morn.	Even.	Height	
		M. S.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	F.	I.
1	Wednes	10 17	6a56	7 3	7 41	4 24	5 7	11 0	11 36	22	6
2	Thurs..	10 36	7 49	8 23	9 10	5 54	6 45	..	0 21	22	6
3	Friday..	10 55	8 40	9 55	10 38	7 29	8 5	1 7	1 45	23	5
4	Satur..	11 13	9 28	11 17	11 49	8 36	9 4	2 23	3 0	24	7
5	Sunday	11 31	10 15	..	0 18	9 27	9 47	3 23	3 56	26	0
6	Mon ..	11 49	11 0	0 41	1 2	10 6	10 26	4 16	4 38	26	11
7	Tues ..	12 6	11 46	1 23	1 44	10 46	11 7	5 0	5 20	27	5
8	Wednes	12 23	12morn.	2 3	2 22	11 22	11 39	5 41	6 0	27	8
9	Thurs..	12 40	0 32	2 28	2 54	11 57	..	6 17	6 33	27	6
10	Friday..	12 56	1 20	3 12	3 28	0 14	0 32	6 50	7 7	26	8
11	Satur..	13 11	2 8	3 45	4 1	0 49	1 5	7 24	7 41	26	2
12	Sunday	13 26	2 57	4 17	4 34	1 22	1 39	8 0	8 16	24	10
13	Mon ..	13 41	3 46	4 51	5 8	1 55	2 13	8 34	8 51	24	3
14	Tues ..	13 55	4 35	5 26	5 46	2 33	2 52	9 8	9 28	22	9
15	Wednes	14 8	5 23	6 7	6 30	3 14	3 41	9 50	10 18	21	10
16	Thurs..	14 21	6 10	6 58	7 29	4 12	4 51	10 48	11 13	21	3
17	Friday..	14 33	6 56	8 7	8 47	5 30	6 13	11 53	..	21	2
18	Satur..	14 45	7 42	9 27	10 5	6 55	7 33	0 33	1 13	22	1
19	Sunday	14 56	8 28	10 42	11 16	8 4	8 33	1 47	2 21	23	5
20	Mon ..	15 6	9 14	11 46	..	8 56	9 16	2 46	3 11	25	0
21	Tues ..	15 16	10 3	0 9	0 30	9 35	9 55	3 36	4 0	26	7
22	Wednes	15 25	10 54	0 50	1 11	10 14	10 32	4 25	4 50	27	9
23	Thurs..	15 33	11 48	1 31	1 50	10 52	11 14	5 11	5 33	28	6
24	Friday..	15 41	0a46	2 9	2 30	11 35	11 57	6 53	6 13	28	7
25	Satur..	15 48	1 48	2 51	3 12	..	0 19	6 36	6 57	28	4
26	Sunday	15 54	2 50	3 33	3 55	0 42	1 6	7 21	7 45	27	8
27	Mon ..	15 59	3 52	4 18	4 42	1 30	1 53	8 9	8 34	26	8
28	Tues ..	16 4	4 51	5 6	5 31	2 18	2 44	8 57	9 21	25	3
29	Wednes	18 8	5 46	5 58	6 28	3 12	3 41	9 50	10 19	23	9
30	Thurs..	16 11	6 37	6 58	7 32	4 15	4 54	10 52	11 25	22	10
31	Friday..	16 14	7 26	8 10	8 52	5 35	6 19	12 0	..	22	8

The above are in Greenwich Time, if local Mean Time be required for
 Liverpool, *sub.* 12m.—Barnstaple, *sub.* 17m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 7th, 8h. 46m. p.m. | New Moon .. 23rd, 7h. 37m. a.m.
 Last Quarter. 15th, 11h. 42m. p.m. | First Quarter. 29th, 11h. 44m. p.m.

M. D.	WEEK DAYS.	Bridgwater.					Bristol.					Cardiff.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	..	..	0	28	9	2	..	..	0	18	20	7	11	58	..	..	19	8
2	Thursday	1	16	2	4	9	2	1	6	1	54	19	10	0	46	1	34	19	7
3	Friday	2	54	3	39	10	4	2	44	3	29	21	7	2	23	3	9	20	8
4	Saturday	4	16	4	48	11	9	4	6	4	38	24	2	3	43	4	18	22	7
5	Sunday	5	16	5	43	13	6	5	6	5	33	26	5	4	46	5	13	24	9
6	Monday	6	7	6	29	14	8	5	57	6	19	28	3	5	37	5	59	26	3
7	Tuesday	6	51	7	10	15	4	6	41	7	0	29	7	6	20	6	38	26	8
8	Wednesday	7	26	7	43	15	7	7	16	7	33	30	0	6	56	7	12	27	4
9	Thursday	7	58	8	15	15	5	7	48	8	5	29	11	7	29	7	44	27	1
10	Friday	8	29	8	45	14	4	8	19	8	35	29	2	8	0	8	15	26	0
11	Saturday	8	58	9	14	13	9	8	48	9	4	27	9	8	28	8	43	25	3
12	Sunday	9	25	9	43	12	1	9	15	9	33	25	8	8	55	9	13	23	6
13	Monday	9	54	10	15	11	4	9	44	10	5	23	6	9	24	9	44	22	0
14	Tuesday	10	20	10	42	9	6	10	10	10	32	20	10	9	49	10	12	20	1
15	Wednesday	10	50	11	26	8	4	10	40	11	16	18	4	10	20	10	56	18	4
16	Thursday	11	46	..	..	7	6	11	36	..	..	17	0	11	16	..	..	17	6
17	Friday	0	42	1	17	7	5	0	32	1	7	16	8	0	12	0	47	17	3
18	Saturday	2	20	2	49	8	8	2	10	2	39	18	5	1	50	2	19	18	8
19	Sunday	3	40	4	4	10	4	3	30	3	54	21	3	3	10	3	34	20	6
20	Monday	4	45	5	0	12	3	4	35	4	50	24	5	4	15	4	28	23	2
21	Tuesday	5	53	5	50	14	3	5	23	5	40	26	10	5	3	5	20	25	7
22	Wednesday	6	19	6	38	15	9	6	9	6	28	29	0	5	46	6	8	27	7
23	Thursday	7	2	7	23	16	8	6	52	7	13	30	9	6	32	6	53	28	3
24	Friday	7	44	8	3	16	9	7	34	7	53	31	7	7	15	7	33	29	0
25	Saturday	8	27	8	43	16	5	8	17	8	33	31	7	7	57	8	14	28	9
26	Sunday	9	5	9	25	15	7	8	55	9	15	30	9	8	35	8	55	27	9
27	Monday	9	46	10	10	14	4	9	36	10	0	28	11	9	16	9	39	26	4
28	Tuesday	10	33	10	56	12	7	10	23	10	46	26	4	10	3	10	26	24	1
29	Wednesday	11	24	11	55	10	9	11	14	11	44	23	8	10	54	11	24	21	9
30	Thursday	..	..	0	29	9	7	..	..	0	19	21	8	12	0	..	..	20	0
31	Friday	1	7	1	50	9	4	0	57	1	40	21	1	0	37	1	20	19	7

The above are in Greenwich Time, if local Mean Time be required for
 Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.—Cardiff, *sub.* 13m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 6th, 7h. 37m. a.m. | New Moon .. 21st, 5h. 4m
 Last Quarter.. 14th, 10h. 33m. a.m. | First Quarter. 27th, 11h. 44m

M. D.	WEEK DAYS.	Gloucester.						Ilfracombe.						Llanelly					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.		
1	Monday..	3	16	3	50	20	1	1	17	1	52	16	6	1	51	2	26	1	
2	Tuesday..	4	24	4	57	21	4	2	27	2	57	17	3	3	0	3	31	1	
3	Wednesday	5	27	5	56	22	8	3	28	3	53	18	0	4	2	4	27	1	
4	Thursday..	6	19	6	43	23	2	4	17	4	40	18	9	4	51	5	14	1	
5	Friday ..	7	5	7	26	24	6	5	4	5	24	19	1	5	38	5	58	1	
6	Saturday..	7	46	8	7	25	0	5	44	6	4	19	2	6	18	6	36	1	
7	Sunday ..	8	25	8	42	25	4	6	20	6	38	19	3	6	54	7	12	1	
8	Monday..	9	0	9	17	25	2	6	56	7	12	19	2	7	30	7	46	1	
9	Tuesday..	9	34	9	50	25	1	7	28	7	45	19	0	8	2	8	19	1	
10	Wednesday	10	6	10	21	24	8	8	2	8	19	18	8	8	36	8	53	1	
11	Thursday..	10	38	10	54	24	4	8	37	8	54	18	6	9	11	9	28	1	
12	Friday ..	11	11	11	28	23	0	9	12	9	33	18	0	9	46	10	7	1	
13	Saturday..	11	45	..	..	22	0	9	54	10	14	17	5	10	28	10	48	1	
14	Sunday ..	0	6	0	28	20	2	10	35	11	0	16	6	11	9	11	33	1	
15	Monday..	0	54	1	24	19	6	11	23	11	58	16	2	11	57	..	..	1	
16	Tuesday..	1	56	2	31	19	10	..	..	0	27	16	3	0	29	1	0	1	
17	Wednesday	3	8	3	44	21	4	1	6	1	45	17	0	1	40	2	19	1	
18	Thursday..	4	19	4	53	23	7	2	19	2	55	18	6	2	53	3	29	1	
19	Friday ..	5	28	6	3	26	7	3	28	4	2	20	3	4	2	4	36	2	
20	Saturday..	6	34	7	6	27	7	4	32	5	0	21	5	5	6	5	35	2	
21	Sunday ..	7	36	8	6	29	4	5	29	5	58	21	7	6	3	6	32	2	
22	Monday..	8	30	8	56	30	6	6	23	6	49	22	2	6	57	7	23	2	
23	Tuesday..	9	20	9	43	31	0	7	11	7	34	22	6	7	45	8	8	2	
24	Wednesday	10	6	10	27	30	8	7	58	8	23	22	1	8	32	8	57	2	
25	Thursday..	10	49	11	9	29	3	8	45	9	8	21	4	9	19	9	42	2	
26	Friday ..	11	27	11	44	26	7	9	28	9	49	20	0	10	2	10	23	2	
27	Saturday..	..	..	0	2	23	8	10	10	10	31	18	5	10	44	11	5	1	
28	Sunday ..	0	23	0	48	21	0	10	54	11	17	17	0	11	28	11	51	1	
29	Monday..	1	16	1	46	18	10	11	47	..	15	9	..	..	0	21	1	1	
30	Tuesday..	2	21	2	58	17	8	0	18	0	56	15	1	0	52	1	30	1	
31	Wednesday	3	32	4	6	17	10	1	35	1	51	15	5	2	9	2	25	1	

The above are in Greenwich Time, if local Mean Time be required for
 Gloucester, *sub.* 10m.—Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 6th, 7h. 37m. a.m. | New Moon .. 21st, 5h. 4m. a.m.
 Last Quarter. 14th, 10h. 33m. a.m. | First Quarter. 27th, 11h. 44m. p.m.

M. D.	WEEK DAYS.	Pembroke Dock.				Newport.				Swansea.			
		Morn.	Even.	Height		Morn.	Even.	Height		Morn.	Even.	Height	
		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.	
1	Monday..	1 51	2 27	16 7		2 33	3 12	21 9		1 41	2 17	17 5	
2	Tuesday..	3 1	3 32	17 3		3 41	4 15	22 11		2 51	3 22	18 3	
3	Wednesday	3 59	4 26	18 0		4 44	5 6	24 2		3 49	4 16	19 2	
4	Thursday..	4 49	5 12	18 8		5 32	5 55	25 2		4 39	5 2	20 0	
5	Friday ..	5 34	5 55	19 0		6 12	6 35	25 11		5 24	5 45	20 5	
6	Saturday..	6 15	6 34	19 1		6 48	7 9	26 6		6 5	6 24	20 6	
7	Sunday ..	6 51	7 10	19 3		7 23	7 44	26 8		6 41	7 0	20 7	
8	Monday..	7 26	7 44	19 2		7 54	8 18	26 6		7 16	7 34	20 6	
9	Tuesday..	8 1	8 18	19 0		8 25	8 50	26 4		7 51	8 8	20 4	
10	Wednesday	8 36	8 52	18 7		9 0	9 24	26 0		8 26	8 42	19 11	
11	Thursday..	9 11	9 30	18 5		9 31	9 58	25 8		9 1	9 20	19 8	
12	Friday ..	9 48	10 8	18 0		10 8	10 34	24 5		9 38	9 58	19 2	
13	Saturday..	10 27	10 49	17 6		10 42	11 10	23 7		10 17	10 39	18 6	
14	Sunday ..	11 10	11 33	16 7		11 29	..	21 11		11 0	11 23	17 5	
15	Monday..	12 0	..	16 3		0 4	0 30	21 3		11 50	..	17 0	
16	Tuesday..	0 30	1 2	16 5		1 16	1 46	21 7		0 20	0 52	17 2	
17	Wednesday	1 42	2 20	17 1		2 34	3 0	22 11		1 32	2 11	18 0	
18	Thursday..	2 56	3 27	18 5		3 45	4 12	25 0		2 46	3 17	19 8	
19	Friday ..	4 0	4 33	20 1		4 54	5 16	27 9		3 50	4 23	21 9	
20	Saturday..	5 3	5 35	21 1		5 49	6 17	29 7		4 53	5 25	23 0	
21	Sunday ..	6 5	6 32	21 3		6 46	7 15	30 3		5 55	6 22	23 3	
22	Monday..	6 56	7 23	21 10		7 42	8 8	31 4		6 46	7 13	23 11	
23	Tuesday..	7 47	8 10	22 1		8 31	8 53	31 10		7 37	8 0	24 3	
24	Wednesday	8 36	8 59	21 9		9 17	9 35	31 6		8 26	8 49	23 10	
25	Thursday..	9 24	9 46	21 0		10 0	10 20	30 2		9 14	9 36	22 11	
26	Friday ..	10 6	10 26	19 9		10 43	11 4	27 9		9 56	10 16	21 4	
27	Saturday..	10 45	11 6	18 4		11 25	11 50	25 1		10 25	10 56	19 7	
28	Sunday ..	11 28	11 53	17 0		..	0 15	22 8		11 18	11 43	17 11	
29	Monday..	..	0 20	15 11		0 35	1 6	20 7		..	0 10	16 7	
30	Tuesday..	0 52	1 31	15 4		1 35	2 13	19 7		0 42	1 21	15 10	
31	Wednesday	2 8	2 25	15 7		2 46	3 25	19 9		1 58	2 15	16 2	

The above are in Greenwich Time, if local Mean Time be required for
 Pembroke Dock, *sub.* 20m.—Newport, *sub.* 12m.—Swansea, *sub.* 15 m.

For further explanations, see page 3.

PORT CHARGES, &c.

APPLEDORE.

Mooring, 1s.

Pilotage, as per agreement.

BARNSTAPLE.

Keelage, 4d. per ton register.

Pilotage, as per agreement.

BIDEFORD.

Harbour Dues.—Vessels discharging at public quay, $\frac{1}{2}$ d. per ton register, at private wharf, 2s. 6d.

Pilotage, as per agreement.

BRIDGWATER.

Pilotage.

From the extreme limits of the navigation in the Bristol Channel or from any point between such extreme limits and Burnham Church to the Town or to any point between the Black Rock and the Town the vessel being safely moored;—also from the Town to the limits of the navigation, or to any point between Burnham Church and the said limits, the following Rates, viz.:—

			£	s.	d.
On vessels of 30 tons and under	.....		0	6	6
On vessels above 30 tons and under 50 tons.			0	8	0
" 50 "	65	....	0	10	0
" 65 "	80	....	0	12	6
" 80 "	100	....	0	15	0
" 100 "	120	....	1	0	0
" 120 "	150	....	1	11	0
" 150 "	200	....	2	11	0
" 200 "	300	....	3	6	0
" 300 "	.....		4	1	0

Bridgwater, continued.

From Burnham Church, or from any point between Burnham Church and the Town, to the Town, or to any intermediate point, the vessel being safely moored, and *vice versa*.

	£	s.	d.
On vessels of 30 tons and under	0	4	6
On vessels above 30 tons and under 50 tons.	0	5	6
" 50 " 65	0	6	6
" 65 " 80	0	7	6
" 80 " 100	0	8	6
" 100 " 120	0	10	6
" 120 " 150	1	6	0
" 150 " 200	2	1	0
" 200 " 300	2	11	0
" 300 " 	3	4	0

The above Rates are subject to a reduction of one-fourth part in respect of vessels towed by steam vessels.

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first-mentioned ships shall, by any order of Her Majesty's Most Honorable Privy Council, be privileged to enter the ports of this kingdom, upon paying the same Dues of Tonnage as are paid by British ships; in which case, such ships and vessels not having British registers, shall pay the like Rates of Pilotage only, as are payable by ships having British registers.

If a master choose to employ a pilot for a tide in the navigation, the pilot shall be entitled to receive for such service, two shillings and sixpence for each tide.

Towage.

To or from Burnham, Black Rock, or any intermediate Place, where a Vessel shall stop or get aground (*for one tide only*;) viz:—
Vessels—Light, under one hundred tons register, 3d. per ton; ditto, above, 4d. per ton. (If any goods, 1d. per ton extra.)

Vessels with coal or culm, under 10 feet of water, 3d. per ton; 10 feet, 4d. per ton; 12 feet, 5d. per ton.

Vessels with merchandize, or ballast, 4d. per ton; 10 feet of water, 5d. per ton; 11 feet, 6d. per ton; 12 feet, 7d. per ton.

To or from the Gore to Burnham, or any intermediate place, 3d. per ton. To or from Burnham to Cumbwitch, or any intermediate place, 3d. per ton.

Two-pence per ton over the above rates will be charged for towing up, in all cases where other tugs are employed to tow down.

Should any vessel require a tug, or aid for more than one tide, such assistance must be paid for in addition to the above rates, according to the services rendered.

Harbour Dues.

One penny per ton register, with 1s. fee for moorage.

*Bridgwater, continued.***Tonnage Rates.**

First Class—Vessels entering with cargoes or departing with cargoes—
s. d.

INWARDS. —For every ship or other vessel which shall enter the said basin, from any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Gurnsey, Jersey, Alderney, and Sark—per ton measurement ..		0	3
From any other part of Europe except places within the Straits of Gibraltar, and round the North Cape, and from all British Colonies—per ton measurement ..		0	4
From any port or place in Europe round the North Cape, any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa, and any port or place in the United States of America—per ton measurement ..		0	6
From any port or place in any other part of the world—per ton measurement ..		0	8

OUTWARDS. —For every ship or vessel which shall depart from the said basin to any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney, and Sark,—per ton measurement ..		0	1
To any other part of Europe, except places within the Straits of Gibraltar, and round the North Cape, or to any British Colony,—per ton measurement ..		0	4
To any port or place in Europe round the North Cape, any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa; any port or place in the United States of America—per ton measurement ..		0	6
To any port or place in any other part of the world—per ton measurement ..		0	8

Second Class —Vessels entering without cargoes or in ballast For every ship or other vessel which shall enter into the said basin—per ton measurement ..		0	2
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Third Class —For every ship or other vessel with a cargo which shall enter the said basin and depart therefrom without breaking bulk, or which shall discharge and afterwards take on board and depart with the same cargo—per ton measurement ..		0	4
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And in estimating the dues contained in this schedule, every vessel of less burthen than twenty tons measurement, shall be rated at twenty tons measurement.

Extra basin dues for overtime —For every coal vessel remaining in the basin beyond ten days, for every coasting vessel beyond fourteen days, and for every foreign vessel beyond thirty days from the time of their respectively entering the same—per ton measurement, per month ..		0	2
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BRISTOL.

Rates or Fares for Pilotage.

	If 100 and under 200 tons.		If 200 and under 300 tons.		If 300 and under 500 tons.		If 500 and under 600 tons.		If 600 and under 800 tons.		If 800 and under 1000 tons.		If 1000 tons and upwards.	
	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.
BETWEEN														
Lundy and Coombe	1	1 0	1 8	1 15 0	2 2	2 2	2 2	2 9 0	2 16	3 3 0	3 3 0	3 10		
Lundy and Swansea or Minehead	2	2 0	2 16	3 10 0	4 4	4 4	4 4	4 18 0	5 12	6 6 0	6 6 0	7 0		
Lundy and Bridgwater, Cardiff, or the Holmes	2	12 6	3 10	4 7 6	5 5	5 5	6 2 6	7 0	7 0	7 17 6	8 15			
Lundy and Newport or Kingroad	3	3 0	4 4	5 5 0	6 6	6 6	7 7 0	8 8	9 9 0	10 10	10 10			
Coombe and Minehead	1	1 0	1 8	1 15 0	2 2	2 2	2 9 0	2 16	3 3 0	3 3 0	3 10			
Coombe and Bridgwater, Cardiff, or the Holmes	1	11 6	2 2	2 12 6	3 3	3 3	3 13 6	4 4	4 4	4 14 6	5 5			
Coombe and Newport or Kingroad	2	2 0	2 16	3 10 0	4 4	4 4	4 18 0	5 12	6 6 0	6 6 0	7 0			
Minehead and Bridgwater, Cardiff, or the Holmes	0	10 6	0 14	0 17 6	1 1	1 1	1 4 6	1 8	1 8	1 11 6	1 15			
Minehead and Newport or Kingroad ..	1	1 0	1 8	1 15 0	2 2	2 2	2 9 0	2 16	3 3 0	3 3 0	3 10			
Between any of the following places :— Portishead, Kingroad, Hungroad, Broad Pill, Cumberland or Bathurst Basins, and any other of such places*	0	10 0	0 15	1 0 0	1 5	1 5	1 10 0	1 15	2 0 0	2 0 0	2 5			
Between any two of the following places, viz :—Bridgwater, Cardiff, the Holmes, Newport and Kingroad	0	10 6	0 14	0 17 6	1 1	1 1	1 4 6	1 8	1 8	1 11 6	1 15			

* If under 80 tons, 7s. 6d.

(Any alterations of Pilotage Rates, see end of Book.)

*Bristol, continued.***Harbour Dues.**

For every Vessel trading from Africa, Honduras, Surinam, and other Ports in South America the United States of America, the East and West Indies, all the Ports within the Straits of Gibraltar, the Southern Whale Fishery, the British Colonies, Portugal, Prussia, Russia, Spain, without the Straits, and Sweden—per ton	0	1
For every Vessel trading from Flanders, France, without the Straits, Germany, Gurnsey, Holland, Jersey, Norway, Poland, and Zealand—per ton	0	0
For every Vessel trading from Ireland, the Isle of Man, Scotland, or as a Coaster, not including vessels from Cardiff, Newport, and other Ports to the Eastward of the the Holmes—per ton	0	0
For every Vessel from Cardiff, Newport, or any other Port to the Eastward of the Holmes (not being vessels one-third part of the lading of which shall consist of coal, scroff, iron, tin, tin plates, grain, copper, bricks, stone, coal, tar, slate, bark, timber, or wood,) as follows :—		
If such Vessel shall be under forty tons burthen—for each voyage	0	7
If such Vessel shall be forty tons burthen, and under seventy-five tons—for each voyage	0	12
If such Vessel shall be seventy-five tons burthen, and under one hundred tons—for each voyage	0	16
If such Vessel shall be one hundred tons burthen or upwards—for each voyage	1	1
For every Vessel from Cardiff, Newport, or any other Port to the Eastward of the Holmes, one-third part of the lading of which shall consist of coal, scroff, iron, tin, tin plates, grain, copper, bricks, stone, coal, tar, slate, bark, timber, or wood, as follows :—		
If such Vessel shall not exceed seventy-five tons burthen—for each voyage	0	5
If such Vessel shall exceed seventy-five tons burthen—for each voyage	0	7
N.B.—There are no Dock Rates or other Port Charges payable on Vessels leaving the Port of Bristol.		

Bristol, continued.

For Pilotage Rates and other Charges upon Vessels, *see also Appendix.*

BRITON-FERRY.**River Pilotage.**

Vessels drawing	£.	s.	d.	Vessels drawing	£.	s.	d.
7 feet and under....	0	7	0	11½ feet	0	14	0
7½ feet	0	8	0	12 "	0	15	0
8 "	0	10	0	12½ "	0	16	6
8½ "	0	11	0	13 "	0	18	0
9 "	0	11	2	13½ "	1	0	0
9½ "	0	11	6	14 "	1	4	0
10 "	0	12	0	14½ "	1	7	0
10½ "	0	12	6	15 " and upwards..	1	17	0
11 "	0	13	0				

Towage.

Under 150 tons register.....	Inwards.....	1½d. per ton register.
" 150 "	Outwards	2d. "
Over 150 in and out	"	2d. "

Harbour Dues.

Coastwise or Foreign	1½d. per ton register.
Layage	1s. 6d. each vessel.

Loading Charges.

Trimming Coal, on Cargo.....	2½d. per ton.
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Discharging Ballast.

Without reference to quantity—about 1½d. per ton on cargo.

BURRY PORT.**Harbour Dues.**

For every ship, barge, boat, or other vessel, coming into or going out of the Harbour of Burry Port according to its tonnage, (except seeking freight) the sum of fourpence per ton.

For every ship, barge, boat, or other vessel running into the Inner harbour by stress of weather, and not unloading, the sum of sixpence per ton, and the Outer harbour, the sum of fourpence per ton.

For every ship, barge, boat, or other vessel, coming into the Inner harbour from stress of weather, and lying longer than seven days, the sum of threepence per ton per day, and into the Outer harbour the sum of twopence per ton per day.

Burry Port, continued.

For every ship, barge, boat, or other vessel, coming into the O harbour to seek a freight, of whatever tonnage, and not remain beyond three days, the sum of one shilling.

For every day exceeding three days, one shilling per day.

Stemming Rates.

Vessels not exceeding 20 tons register, 6d.; 50 tons, 1s.; 70 tons, 1s. 6d.; 100 tons, 2s.; exceeding 100 tons, 2s. 6d.

Ballast.

For wheeling, per ton register, Outer Harbour, 1d.; Inner Harbour, 1½d.

For use of planks, barrows, and waggons—

	s.	d.		s.	d.
Not above 100 tons register	1	6	Not above 350 tons register	3	
„ 150	2	0	„ 400	4	
„ 200	2	6	Above 400	4	
„ 300	3	0			

Men to be allowed 1s. for assisting to trip the basket, and the same extra charge for the use of crane and tubs, if required.

For Pilotage, see Llanelly.

BURNHAM.

Harbour Dues, 2d. per ton register. **Beacons**, 4s. per vessel.

Pilotage, as per agreement.

CARDIFF.**Channel Pilotage.**

	£	s.
If 80 and under 100 tons	2	12
100 „ 200 „	3	10
200 „ 300 „	4	7
300 „ 500 „	5	5
500 „ 600 „	6	2
600 „ 800 „	7	0
800 „ 1000 „	7	17
1000 tons and upwards	8	15

River Pilotage.

	s.	d.	
Vessels drawing under 9 feet	1	6	per foot
9 feet and „ 12 „	1	9	„
12 „ 15 „	2	0	„
15 feet and upwards	2	6	„

*Cardiff, continued.***Towage.**

Inwards, in Ballast	1½d. per ton register.
„ with Cargo.....	2d. „
Outwards, „	2d. „

Harbour Dues.**Coastwise :**

Under 100 tons register	2d. per ton register.
100 tons and under 200	3d. „
200 tons and upwards	4d. „
Mediterranean	7d. „
East and West Indies, America, and Brazil ..	9d. „
Baltic	5d. „

Town Dues.

Under 60 tons register	2s. 6d. per vessel.
Above 60 tons register	5s. 0d. „

Loading Charges.

Trimming Coal (single deck).....	2½d. per ton cargo.
„ (double deck).....	3d. „
Wharfage on cargo	2d. per ton.

Discharging Ballast.

Vessels under 200 tons	5d. per ton on quantity.
200 tons and under 400 tons	6d. „
400 „ 600 „	7d. „
600 „ 800 „	8d. „
800 and upwards	9d. „

Tonnage Rates.—Bute Docks.

	s.	d.
FIRST CLASS. —On all sailing or steam vessels entering with		
Cargoes from or departing with cargoes for any Port in the		
United Kingdom, Isle of Man, Jersey, Guernsey, Alderney,		
and Sark, under 100 tons register		
per register ton	0	1½
100 tons and under 200 tons register.....	ditto	0 2
200 tons register and upwards (except steam vessels).....	ditto	0 3
Steam vessels 200 tons register and upwards	ditto	0 2
Rent, after three weeks from date of entrance,		
per register ton, per week	0	0½
SECOND CLASS. —On all sailing or steam vessels with cargoes		
from or departing with cargoes for any Port in Europe,		
between the North Cape and Cape Finisterre. .		
per register ton	0	5
Rent, after three weeks from date of entrance,		
per register ton per week	0	0½

Cardiff, continued.

THIRD CLASS. —On all sailing or steam vessels with cargoes a.	d.
from or departing with cargoes for any other Port in Europe, and the Mediterranean	per register ton 0 7
Rent, after three weeks from date of entrance,	
per register ton per week	0 0½
FOURTH CLASS. —On all sailing or steam vessels with cargoes from or departing with cargoes for all other Foreign Ports whatsoever.....	per register ton 0 9
Rent, after three weeks from date of entrance,	
per register ton per week	0 0½
FIFTH CLASS. —On all sailing or steam vessels entering light, or in ballast, and departing in ballast	per register ton 0 3
Rent, after three weeks from date of entrance,	
per register ton per week	0 0½
SIXTH CLASS. —On all sailing or steam vessels which shall enter laden, and depart without breaking bulk; or which shall discharge and reload, and depart with the same cargo	per register ton 0 6
Rent, after three weeks from date of entrance,	
per register ton per week	0 0½
On every boat, barge, or other craft, which shall enter from the Glamorganshire Canal, and pass through the Dock into the Bristol Channel	per register ton 0 6
On every ship, boat, barge, craft, lighter, or other vessel, which shall enter the Ship Canal, Basin, or Dock, for the purpose of unloading from, or discharging goods, wares, and mer- chandise, on board of any ship, boat, barge, craft, lighter, or other vessel, being within the said Ship Canal, Basin, or Dock; such and the like rates and duties, upon the goods so discharged or loaded, as are taken for wharfage rates, on goods to be landed or loaded upon, or from the Wharfs, or Quays, of the Dock, Basin, or Jetties.	
On all steam or other vessels, which do not enter within the Sea Gates of the Docks, but which shall either discharge or receive passengers or goods, upon any of the Piers, or Jetties, outside those Gates	per register ton 0 2

Bute Tidal Harbour.

On all sailing or steam vessels, discharging or loading,	
per register ton	0 0½

For Pilotage Rates and other Charges upon Vessels, see also *Appendix*.

CARMARTHEN.**Harbour Dues.**

	s.	d.		s.	d.
Vessels under 30 tons	1	0	Vessels 80 to 90 tons	2	6
30 to 60 tons	1	6	90 to 110 tons	3	0
60 to 80 tons	2	0	110 tons and upwards	5	0

Pilotage, as per agreement.

CHEPSTOW.**Harbour Dues.**

One penny per ton register, on all vessels loading or unloading alongside a wharf; also, on all vessels entering or departing the river, if from or to the eastward of the Holmes, 4d.; from or to the westward of the Holmes, 2s. 4d.

CLOVELLY.**Harbour Dues.**

Vessels under 20 tons, 1s.; 20 to 50 tons, 2s.; above 50 tons, ½d. per ton

GLOUCESTER & BERKELEY CANAL.**Rates of Tonnage.***

The Tonnage in all cases is charged and taken upon the gross and not the net weight; and on the ton of 20 cwt. of 112 lbs.

IMPORTS.

	From Foreign Places.		From Ireland, & Coast-wise & Severn.	
	s.	d.	s.	d.
ALE, beer, porter, cider and perry, per brl. of 36 galls.	0	4	0	4
— ditto, in bottle per dozen	0	1	0	1
Barilla per ton	1	6	1	0
Bricks, for building per 1000	2	0	2	0
— scouring, fire, and tiles per ton	2	0	1	0
Brimstone "	1	6	1	0
Bones "	1	0	1	0
Burr stones "	1	6	1	0
Clay "	0	6	0	6
Coals "	0	6	0	6
CORN AND MEAL				
Wheat, and all corn and seed "	1	9	1	6
Flour and other meal "	2	0	2	0
Bran and gurgeons "	1	6	1	6

* NOTE.—Masters or persons in charge vessels must give a true and written account of their cargoes, under a penalty of Forty Shillings a ton. Every person avoiding the payment of the rates, or doing any act whereby the Company are deprived of any rates, is liable to a penalty of Five Pounds.

Gloucester and Berkeley Canal, continued.

IMPORTS, <i>Continued.</i>				From Foreign Places.		From Ireland, & Coast-wise & Severn.	
				s.	d.	s.	d.
Earths	..	..	.. per ton	1	0	1	0
Gunpowder	..	..	.. "	5	0	5	0
Kelp	..	..	.. "	1	6	1	6
Marble	..	..	per ton of 14 cubic ft.	1	6	1	6
Manure	..	..	.. per ton	1	0	1	0
METALS AND ORES							
Copper, spelter, tin, zinc and manganese	..	..	.. "	2	0	0	9
Metallic ores	..	..	.. "	0	9	0	6
Pig iron, and old or loose iron	..	..	.. "	2	0	0	9
All other descriptions of iron	..	..	.. "	2	0	0	9
Oil cake	..	..	.. "	1	6	1	0
Oysters	..	..	per ton of 10 bushels	1	6	1	6
Potatoes	..	..	.. per ton	1	0	1	0
Slates, for roofing	..	..	.. "	2	0	1	6
— for draining	..	..	.. "	2	0	1	0
— slabs, for paving, &c.	..	..	.. "	2	0	1	0
Stone, for roads, pitching, lime, chalk, flint, gravel, and sand	..	..	.. "	0	6	0	6
— for building, block, paving, &c.	..	..	.. "	1	0	1	0
— burr stones	..	..	.. "	1	6	1	0
SPIRITS and wine	..	..	per pipe, pun. or butt	2	6	2	6
—	..	..	per half ditto or hogshead	1	3	1	3
—	..	..	all casks under	0	6	0	6
— in bottle	..	..	.. per dozen	0	1	0	1
WOOD AND WOOD GOODS							
Mahogany and fine woods*	..	..	per ton	2	0	2	0
Other timber and poles†	..	..	.. "	1	6	1	6
Lathwood	..	..	per fathom of 4 feet	2	0	2	0
Deals and battens, per Petersburg standard of 120, 12 ft. long, 11 in. wide, and 1½ in. thick	..	..	..	3	4	3	4
Staves, Baltic pipe	..	..	per 120	3	6	3	6
— Puncheon and hogshead	..	..	.. "	3	0	3	0
— Quebec standard	..	..	.. "	1	6	1	6
— Barrel	..	..	.. "	1	0	1	0
— West India Pun.	..	..	.. "	0	6	0	6
— New Brunswick small	..	..	.. "	0	3	0	3
Laths	..	..	per 1000	0	4	0	4
UNENUMERATED ARTICLES	..	..	per ton	2	0	1	0

* Mahogany, Oak, Ash, Elm, Beech, and other heavy Timber or Wood, 40 feet to the ton.

† Fir, Pine, Deal, and Light Woods, 50 feet to the ton.

Gloucester and Berkeley Canal, continued.

EXPORTS.					To Foreign Places.	To Ireland, & Coast- wise & Severn.
					s. d.	s. d.
Bark	..	..	..	.. per ton	0 6	1 0
Bricks of all kinds	..	..	..	"	0 6	0 6
Clay	..	..	..	"	0 6	0 6
Coals	..	..	..	"	0 6	0 6
Corn, flour, and meal	..	..	..	"	0 6	0 6
METALS AND ORES						
Metallic ores	..	..	..	"	0 6	0 6
"Puddle bars," Pig Iron, and rough						
cast-iron pipes	..	..	..	"	0 6	0 6
All other description of iron and metals				"	0 6	0 9
Salt	..	..	..	"	0 6	0 6
UNENUMERATED ARTICLES	..	..	..	"	0 6	1 0

Regulations.

Tonnage.—One-half of the above Rates shall be charged upon goods conveyed along any part of the canal between the Stroud Junction and Sharpness Point, or the Stroud Junction and Gloucester, excepting goods coming under the operation of the 8th regulation.

If it be proved, to the satisfaction of the toll collectors, that the full rate of tonnage has been paid upon any goods which have passed along the canal, half the full tonnage only shall be charged on such goods repassing along the canal, unless such half rate shall exceed the amount of the export rate, in which case the export rate upon such goods shall be charged.

All goods brought into the canal for sale, and not sold, and then exported in the same bottom, without being landed, shall only be charged with the import rate.

All goods brought into the canal and transhipped for export to foreign parts, or coastwise, shall be charged with the export rate only.

All goods brought into the canal, forming part of a cargo, the original destination of such goods being for any other port than Gloucester, and not landed nor transhipped, shall pass in and out of the canal free of charge, the vessel carrying such goods paying lockage.

All vessels partly laden entering the canal at Sharpness or Gloucester, to complete their cargoes, shall only be charged tonnage rates on the merchandize shipped in the canal, and the usual lockage charges; provided such inward lading is not landed nor transhipped.

All goods brought into the canal, at Gloucester or Sharpness, either by land or water conveyance, and intended for exportation, shall not be charged the tonnage rates until shipped.

All goods brought into the canal at Gloucester, by the Severn, from places above Gloucester, or to the docks at Gloucester, by land carriage, and not conveyed upon the canal below Hempsted Bridge, shall pay a rate of 4d. per ton, or the rate by the table, if it be less than 4d.

Wharfage.—Goods remaining upon the wharfs (except the wharf specified in the following regulation, No. 10,) for above *forty-eight hours*, *twopence* per ton. And all goods remaining upon any of the wharfs, excepting the north wharf, shall be further charged wharfage at the rate of *twopence* per ton per week, and at that rate for any part of a week they may so remain after the expiration of the forty-eight hours. And all goods remaining upon the "*North Wharf*," shall be further charged wharfage at the rate of *one shilling* per ton per week, and at that rate for any part of a week they may so remain, after the expiration of the forty-eight hours.

All goods deposited upon the wharf underneath the "*Pillar Warehouse*," upon the west side of the basin, and remaining there longer than twenty-four hours, shall be charged 1d. per ton per day.

Goods, carriages of every description, and all other things, shall only be placed on the wharfs, roads, and premises of the Canal Company in such manner, and on such parts thereof as the officers of the company may direct; and if any goods, carriages, or other things shall be placed contrary to their directions, the officers of the company may remove the same; and wharfage at the rate of 6d. per ton per hour shall be charged, after notice shall have been given to remove the same.

Floatage of Timber.—For timber discharged from vessels into the canal, on the south side of "*Siller's Bridge*," and remaining afloat on the south side of such bridge, after the expiration of thirty days, a floatage rate of one halfpenny per stick per week shall be paid, and in like proportion for any part of a week; and if such timber should be removed to any part of the canal, on the north side of such bridge, a floatage rate of 1d. per stick for the first week after such removal, and 2d. per stick per week afterwards, and in like proportion for any part of a week, shall be paid.

For timber discharged from vessels into the canal, on the north side of "*Siller's Bridge*," and remaining afloat on the north side of such bridge, after the expiration of fifteen days, a floatage rate of 1d. per stick per week shall be paid, and in like proportion for any part of a week; and should it remain afloat on the north side of such bridge longer than twenty-eight days, after the fifteen days, 2d. per stick per week, and in like proportion for any part of a week, shall be paid.

All timber sold and delivered from one merchant to another, and put into the canal from the yards, and floating in the canal or basins two weeks following, shall pay 2d. per stick per week, and in like proportion for the whole time it may remain afloat. And all timber

Gloucester and Berkeley Canal, continued.

imported in trows or barges discharged into the canal, shall be subject to the same regulation and charge.

No timber shall be permitted to remain afloat, so as to endanger the navigation of any vessel along the canal, or interrupt or render inconvenient the navigation of the canal.

Craneage.

			£	s.	d.	
For each lift under 2 tons	..		0	0	3	per ton.
2 tons and under 5 "	..		0	0	6	"
5 "	6 "	..	0	10	0	for each lift.
6 "	7 "	..	0	12	0	"
7 "	8 "	..	0	16	0	"
8 "	9 "	..	1	2	0	"
9 "	10 "	..	1	10	0	"
10 tons.....			2	0	0	"

All lifts exceeding 10 tons can only be made by special agreement with the Company, and at rates not less than 10s. for every ton above the preceeding.

			£	s.	d.	
10 tons and under 11 tons..			2	0	0	for each lift.
11 "	12 "	..	2	10	0	"
12 "	13 "	..	3	0	0	"
13 "	14 "	..	3	10	0	"
14 "	15 "	..	4	0	0	"

Lockage.—Every vessel passing through the Company's Locks, empty or in ballast, shall pay 1d. per ton on the register tonnage for each lock of water; and every vessel bringing into, or conveying along the Canal, a less quantity of goods than her register tonnage, shall pay 1d. per ton per lock, on the difference between the tonnage of the goods on board, and the register tonnage of the vessel—provided that the hold of the vessel is not full.

In all cases of removal of goods, wares, and merchandize, from the Company's Wharfs or Docks, through the locks, upon which the above rates of tonnage have been paid, such further payment only shall be made as will amount to 1d. per ton on the register tonnage of the vessel departing with such goods.

Moorage.—All vessels remaining in the Canal or Basins longer than one calendar month, shall be charged upon the register tonnage, the following rates, viz.:—One halfpenny per ton per week, if such vessels shall be moored, or remain on the north side of Hempsted Bridge, and one farthing per ton per week, if moored, or remaining in any part of the Canal below Hempsted Bridge.

Lockage and Moorage.—Boats and vessels under twenty tons burthen shall be rated as twenty tons.

Gloucester and Berkeley Canal, continued.

Weighing Machine Rates.—For coal, manure, stone, and gravel, 2d. per ton: all other goods, 3d. per ton.

Tracking.—The following scale of charges shall be paid by the masters of vessels for tracking, viz. :—

For the whole length of the Canal.

For vessels under 26 tons 8s. 6d. each way.

„ above 26 and not exceeding 150 tons, 4d. per ton.

„ above 150 { for 150 tons 4d. „
 { for the remainder 2½d. „

One-half of the above rates shall be paid to and from the Junction, and ½d. per ton per mile for all intermediate distances.

Rates .

For Piloting and Conducting Ships and Vessels up and down the River Severn between King Road and Sharpness Point.

Rates chargeable upon vessels employed in the Foreign or over-sea trade :—

	s.	d.	
Vessels drawing less than 7 feet water	2	6	per foot
„ 7 feet and under 10 feet	3	0	„
„ 10 feet and under 12 feet	3	6	„
„ 12 feet and under 14 feet	4	0	„
„ 14 feet and upwards....	5	0	„

Rates chargeable upon vessels employed solely in the coasting trade of the United Kingdom, and being under the burthen of 95 tons register tonnage :—

	s.	d.	
Vessels drawing less than 7 feet water	2	0	per foot
„ 7 feet and under 10 feet	2	3	„
„ 10 feet and under 12 feet	3	0	„
„ exceeding 12 feet draft of water, or 95 tons register, to be chargeable with the over-sea rates.			

Rates chargeable upon vessels bound to, and laden with coals from Lydney or Bullo Pill :—

	s.	d.	
Vessels drawing less than 7 feet water	1	3	per foot
„ 7 feet and under 10 feet	1	6	„
„ 10 feet and under 12 feet	1	9	„
„ 12 feet and under 14 feet	2	0	„
„ 14 feet and upwards....	2	6	„

For the pilotage from King-road to Slimeroad, or the Old Passage, and vice versa, one-half the foregoing rates on vessels trading to and from Gloucester.

Vessels taking a pilot from Sharpness Point to Lydney, or from

Gloucester and Berkeley Canal, continued.

Lydney to Sharpness, and thence to King-road, to be charged with the Gloucester rates.

Vessels towed by steam vessels to be charged one-fourth less than the above rates.

Pilots detained on board vessels whilst discharging their cargoes, or part thereof, or loading at any place in the River Severn short of their ultimate destination, shall be entitled to compensation, in addition to their pilotage, at the rate of 7s. 6d. per day for such detention,

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first-mentioned vessels shall, by any order of Her Majesty's Most Honourable Privy Council, be privileged to enter ports of this kingdom, upon paying the same duties of tonnage as are paid by British ships; in which case such ships and vessels not having British registers shall pay the like rates of pilotage only as are paid by ships having British registers.

Canal Pilotage.

The Canal Pilots are authorized to demand and take the following Charges for Piloting Vessels up or down the Canal.

Vessels under 75 tons register 5s. 0d. up or down

Vessels 75 and under 100 tons register.. 7s. 6d. „

Register Tonnage.	Draft of Water.		Charge.		Register Tonnage.	Draft of Water.		Charge.	
	ft.	in.	s.	d.		ft.	in.	s.	d.
100 ..	11	0	..	10 0	250 ..	12	6	..	16 0
125 ..	11	3	..	11 0	275 ..	12	9	..	17 0
150 ..	11	6	..	12 0	300 ..	13	0	..	18 0
175 ..	11	9	..	13 0	325 ..	13	3	..	19 0
200 ..	12	0	..	14 0	350 ..	13	6	..	20 0
225 ..	12	3	..	15 0	375 ..	13	9	..	21 0

And 6d. additional for every 3 inches draft of water above.

HAVERFORDWEST.

Keelage and Wharfage.—One penny per ton registered tonnage.

ILFRACOMBE.**Keelage.**

For every ship or vessel driven in by stress of weather, &c.

Coasters belonging to the port 0s. 6d.

„ not belonging to the port .. 1s. 6d.

Vessels going to or coming from any of Her Majesty's Plantations in Asia, Africa, or America, 2s. 6d.

Also, for every vessel paying keelage, the additional sum of 6d. for each Top borne by such vessel.

*Ilfracombe, continued.***Lighthouse.**

For every vessel belonging to the port 0s. 6d.

For every vessel not belonging to the port 1s. 0d.

The Light is kept up from the 1st day of September to the last day of March in every year.

Mooring Chains and Buoys.

Smacks, 1s.

Two-mast vessels, 2s.

Harbour Dues.

Coasting Smacks, 3s. 6d. Schooners, 4s. 6d. Brigs, 5s. 6d.

Foreign going, 1s. extra.

When the Light is out, 6d. each less for vessels belonging to the Harbour, and 1s. each less for vessels not belonging to the Harbour.

LLANELLY.**Pilotage.**

RULES for the payment of pilots and hobbler taking charge of ships or vessels trading over the Bar of Burry, and bound to Llanelly, Pembrey, Burry Port, and upwards as far as Llangennech.

LIMIT No. 1.—If a pilot be taken on board as far to the westward as to bring Rhossilly Church open to the westward of the Holmes, he is to be paid for every foot of water the vessel may draw.

LIMIT No. 2.—If taken on board within No. 1, but to the westward of No. 4 buoy for Pembrey, or No. 6 for Llanelly.

	Limit No. 1.		Limit No. 2.		Outwards.	
	s.	d.	s.	d.	s.	d.
Under 50 tons register ..	1	6	0	9	0	9
From 50 to 75 „ ..	1	9	1	0	1	0
75 to 100 „ ..	2	0	1	3	1	3
100 to 125 „ ..	2	3	1	6	1	6
125 to 150 „ ..	2	6	1	9	1	9
150 to 175 „ ..	2	9	2	0	2	0
175 to 200 „ ..	3	0	2	3	2	3
200 to 225 „ ..	3	3	2	6	2	6

and 3d. per foot for every additional 25 tons register.

Pilots taken on board inside buoy No. 6, when bound for Llanelly, or inside No. 4, when bound for Pembrey, to be paid 2s. 6d. each for a hobble.

If any vessel shall evade being boarded by a pilot in Limit No. 1, she shall pay for Limit No. 1, although boarded above that limit, besides the penalty for refusing a pilot.

Every vessel paying 2s. per foot and upwards, shall be taken by the pilot clear of the Holmes, if required.

Each vessel to pay 1s. for the boat.

Llanelly, continued.

That when any vessel not exceeding 125 tons register shall have the assistance of a steam-tug in taking her out to sea, a reduction of ten per cent. shall be made on her outward pilotage.

That all vessels proceeding above Llanelly shall pay as follows, in addition to the rates inwards and outwards from Llanelly :—

	To or from Penclawdd.			To or from Spitty.			Penclawdd to Spitty.			Harbour Pilotage.	
	s.	d.		s.	d.		s.	d.		s.	d.
Under 50 tons register ..	2	6	..	4	0	..	2	6	..	2	0
From 50 to 100 „ ..	3	6	..	6	0	..	3	6	..	3	0
100 to 150 „ ..	4	6	..	8	0	..	4	6	..	4	0
150 to 200 „ ..	6	0	..	9	6	..	6	0	..	5	0

and 6d. for every additional 25 tons register.

For removing vessels between

	Llanelly and Pembrey.			Pembrey and Burry Port.	
	s.	d.		s.	d.
Under 50 tons register ..	3	6	..	3	0
75 „ ..	4	6	..	4	0
100 „ ..	5	6	..	4	6

For every additional 25 tons—Llanelly and Pembrey, 1s. ; Pembrey and Burry Port, 6d.

Vessels sailing from the port, and putting back after having discharged their pilots, to pay half pilotage in and out.

Three shillings and sixpence to be the rate charged for a Bar hobble.

“Ceres” Pilot Ship.

That a charge of 2s. 6d. per 100 tons register be made upon every vessel taking a pilot boarded from the “Ceres.”

Ballast Rates.

Every vessel shall pay for every ton discharged, $4\frac{3}{4}$ d.

For each man otherwise employed, $\frac{3}{4}$ d. per ton.

Buoyage Dues.

For every ship or other vessel entering into the rivers Burry, Loughor, and Lliedi, or either of them, from and over the Bar of Burry, 1d. per ton register.

Dock Dues.

Llanelly or New Dock..... 2d. per ton register.

Copper Works Dock 1d. „

Carmarthenshire Dock, 1d. per ton register, for vessels entering or using the Dock, and 1d. per ton the first week, and a farthing per ton every week after, if for repairs or lying up.

LYDNEY.

Tonnage Rates.

	s.	d.
Capacity to carry 1 to 10 tons	1	0
„ 11 to 20 tons	2	0
„ 21 to 30 tons	3	0
„ 31 to 44 tons	4	0
„ 45 to 50 tons	4	6
„ 51 to 80 tons	5	0
„ 81 to 100 tons	6	0
„ 101 and upwards	7	6

MILFORD.

DEFINITION OF LIMITS.

From Caldy Island along the coast to St. David's Head, and from thence to Cardigan Island, and *vice versa*; and to and from, and into and out of all Ports and Places within these Limits.

Pilotage Rates,

For Piloting Ships into the Harbour of Milford, and up and down the said Harbour.

	Under 14 ft. per foot. £ s. d.	14 ft. & up per foot. £ s. d.
<i>From a line drawn from St. Ann's Point to Sheep's Island, to any part of the Harbour below a line drawn from Newton Noyse Point to Martin's Haven.....</i>	0 2 6	0 3 6
<i>From a line drawn from St. Ann's Point to Sheep's Island, or from Habberstone Road, to any place above a line drawn from Newton Noyse Point to Martin's Haven in addition.....</i>	0 2 0	0 2 6

Vessels inward-bound not boarded until they have passed a line drawn from Rat Island to Watwick Point, are to pay one-fourth less than the foregoing rates, and if not boarded until they have passed a line drawn from Thorne Island to Great Castle Head, they are to pay one-half only of the said rates, and if not boarded until they have passed the Stack Rock, to a line from Newton Noyse Point to Martin's Haven, they are not to be chargeable with any pilotage unless the masters thereof require pilotage assistance.

*Milford, continued.***Additional Rates,***For Ships boarded without the Entrance of the Harbour.*

	£	s.	d.
From a line drawn from Leuny Point to Skokham Island,			
in addition, per foot	0	2	0
If to the southward of St. Gowan's Head, ditto	0	1	0
Or from Caldy Island eastward, or from the westward of the Grassholm, or three leagues without Leuny Point,			
in addition to the Harbour Pilotage	3	3	0
Six leagues, ditto	4	4	0
Ten leagues, ditto	6	6	0

Provided a clear understanding shall have been come to between the pilot and the master of the ship, that his services are accepted and that he is to receive such additional pay, and the same shall have been recorded in the log book of his cutter and in that of the ship, and the pilot shall have received from the master a certificate to that effect.

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first-mentioned ships shall by any order of Her Majesty's most Honorable Privy Council, be privileged to enter the ports of this Kingdom upon paying the same duties of tonnage as are paid by British ships, in which case such ships and vessels not having British registers shall pay the like rates of pilotage only as are payable by ships having British registers. The said surplus rate chargeable on unprivileged Foreign vessels is to be paid to the Collector of this Corporation's Light Duties, at the Custom House, Milford.

Port Charges.

	£.	s.	d.
Keelage	0	0	4
Making fast to the rings	0	0	6
Quayage and moorage per ton register	0	0	0½
Foreign vessels, loading or discharging, per ton ..	0	0	6
Coasting vessels, loading or discharging, per ton ..	0	0	2
Loading ballast per ton	0	0	2
Deposit for landing ballast on quay	1	0	0
Ballast lying on the quay per ton	0	0	0½
Use of beach discharging	0	1	0
Use of beach outfitting or repairing, per ton register	0	0	1
Vessels lying alongside the quay for any period not exceeding one month—per ton register	0	0	2
And for every succeeding month	0	10	0

NEATH.

Rates of Pilotage.

		1st Station.			2nd Station.			3rd Station.		
		£.	s.	d.	£.	s.	d.	£.	s.	d.
Vessels drawing 7 feet and under		0	7	0	0	8	0	0	10	0
"	7½ feet	0	8	0	0	9	6	0	11	6
"	8 "	0	10	0	0	11	9	0	13	9
"	8½ "	0	11	0	0	12	0	0	15	0
"	9 "	0	11	2	0	12	6	0	15	6
"	9½ "	0	11	6	0	13	2	0	16	8
"	10 "	0	12	0	0	14	0	0	17	6
"	10½ "	0	12	6	0	14	9	0	18	3
"	11 "	0	12	0	0	15	6	0	19	0
"	11½ "	0	14	0	0	16	6	1	0	0
"	12 "	0	15	0	0	19	0	1	2	0
"	12½ "	0	16	6	1	1	0	1	4	0
"	13 "	0	18	0	1	3	0	1	6	0
"	13½ "	1	0	0	1	5	6	1	9	0
"	14 "	1	4	0	1	10	0	1	15	0
"	14½ "	1	7	0	1	14	0	2	0	0
"	15 and upwards	1	17	0	2	2	0	2	7	0

FIRST STATION.—From outside of Neath Bar to the Layer, and to any distance between the Layer and Southern end of the Abbey Estate, and *vice versa*.

SECOND STATION.—From outside of Neath Bar to any distance lying between the inner termination of the First Station and the Abbey Pill, and *vice versa*.

THIRD STATION.—From outside of Neath Bar to any distance lying between the Abbey Pill and Neath Bridge, and *vice versa*.

The above Rates include the Charges for Boats and Hobblers.

For conducting vessels from one of the above-named stations to another within the port:—

For vessels under 100 tons	3s.
" " 130 "	4s.
" above 130 "	5s.

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first-mentioned ships shall, by any order of Her Majesty's most Honorable Privy Council, be privileged to enter the ports of this kingdom, upon paying the same duties of tonnage as are paid by British ships, in which case such ships and vessels not having British registers shall pay the like rates of pilotage only as are payable by ships having British registers.

Pilot leading the way (if required by the master of the vessel following), entitled to half-pilotage as far as he shall lead.

Pilot from or to the Mumbles (when required by the master), to receive, in addition, 4s.

*Neath, continued.***Rates to Hobblers.**

	s.	d.
Hobblers over the Bar, to or from the Layer or Giant's Grave, or the southern end of the Abbey Estate..	2	6 per vessel
Hobblers over the Bar, to or from Fox's Coal Bank, or the Copper Works, or the Abbey Pill..	3	0
Hobblers over the Bar, to or from Melincrythan Wharf or Neath Bridge	4	0
Hobblers employed in removing or assisting vessels within the Harbour	1	6 per tide

Towage Rates and Regulations.**INWARDS.**

	Per ton register.	s.	d.
From the Outer Buoy to Layer or Giant's Grave ..	0	1½	
" " Abbey Coal or Crown Copper Works..	0	1½	
" " Mines Royal Copper Works ..	0	2	
" " Neath	0	2½	

OUTWARDS.

From Giant's Grave or the Layer to Sea or Outward Buoy	0	2
" Abbey Coal or Crown Copper Works to Sea or Outward Buoy	0	2½
" Abbey Pill or Mines Royal Copper Works to Sea or Outward Buoy	0	2½
" Neath to Sea or Outward Buoy	0	2½

Vessels that may require to be towed shorter distances, if not having been offered the steamer to tow them the whole distance from where they were laden or going to load, to pay as under:—

From the Layer to Giant's Grave, and <i>vice versa</i> ..	0	0¾
" Abbey Coal or Crown Copper Works..	0	1
" Abbey Pill or Mines Royal Copper Works	0	1½
" Neath	0	1½
From Giant's Grave to Abbey Coal or Crown Copper Works	0	0¾
" Abbey Pill or Mines Royal Copper Works	0	1
" Neath	0	1½
From Abbey Coal or Crown Copper Works to the Pill ..	0	0¾
" " " Neath ..	0	1
Light vessels towed from Swansea or Port Talbot to Giant's Grave	0	2
Light vessels towed from Neath Harbour to Swansea or Port Talbot	0	6
Loaded vessels towed to Swansea or Port Talbot (in addition to the rate of towage from the various Stations to the Outward Buoy)	0	3

Neath, continued.

	s.	d.
Vessels from 150 tons register and upwards, for towage in or out, to or from Giant's Grave	0	3

All vessels, not exceeding thirty tons register to pay 3s. 6d. for towage in or out, to or from Giant's Grave.

Three shillings the lowest rate for any towage.

Vessels that have been offered the use of the steam tug to tow the whole distance from where they were laden or going to load, and having refused to take her, should they afterwards require her on that tide to tow, however short the distance, will be charged the same amount as if towed the whole distance from where the steamer was offered. Should there, on the other hand, be a greater number of vessels ready for sea, or coming in, than the steamers can tow, at any one time, on the same tide, then, and in that case only, those vessels which may follow, under canvas, &c., and may afterwards require the assistance of the steamers, will only be charged according to the rates for distance.

Masters should stem their vessels for the steamers as early as possible after their arrival. It may sometimes occur that there may be a vessel or vessels in the river above Giant's Grave, and which may have stemmed for the steamer, and that there may be only one vessel previously stemmed to Giant's Grave: in such case the steam boats shall not be prevented from going up for those vessels, provided the masters of the steamers shall deem it prudent so to do, and with certainty of the steam boats being down in sufficient time to take those which have stemmed before those above in tow, from Giant's Grave, to sea at the same time and tide.

The stemming money being for vessels outward bound, to be allowed in part payment of the towage fees, which must be paid immediately on the completion of the work by the tug, to the agent, or to the master of the said tug, or, if required, previous to the tow-rope being taken on board the tug.

The stemming book is kept at the Harbour Office.

No vessel to be entered on the stemming book until the stemming money is paid.

Signals for the steamers to be two flags at the mainmast; and any vessel making such signal (the steamer in consequence proceeding to her assistance) will be liable to the tonnage for towing from the outward buoy to Giant's Grave.

Tonnage Rates.

For every ship or vessel which shall anchor, load, or unload within the said port, or which shall be made fast to any pier or other work within the same, or any part thereof, the sum of 1½d. per ton of the register tonnage of such ship or vessel.

NEWPORT.

Tonnage Rates.

Coastwise, $\frac{1}{4}$ d. per ton register. Foreign, $\frac{1}{4}$ d. per ton register.

Keelage.

One penny per ton taken or discharged at the Wharves in the River.

Tonnage Rates—Docks.

	s.	d.
INWARDS. —For every ship or other vessel which shall enter the said dock from any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney, and Sark, per ton measurement	0	2
For every other part of Europe, except places within the Straits of Gibraltar and round the North Cape, per ton measurement	0	5
From any port or place in Europe round the North Cape, or any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa, per ton measurement	0	7
From any port or place in British America, any port or place in the United States of America, or any port or place in any other part of the world, per ton measurement	0	10
For every ship or other vessel, with a cargo, which shall enter the said dock, and depart therefrom, within three weeks from the day of entry, without breaking bulk, or which shall discharge, and afterwards take on board, and depart with the same cargo, within such period of three weeks, per ton measurement (exclusive of the dues under the name of rent,) hereinafter mentioned	0	6
For every ship or other vessel which shall have departed from the said dock, with a cargo, or any part of such cargo laden therein, and shall re-enter the said dock with the same cargo, or part of such cargo, per ton measurement, (exclusive of the dues under the name of rent hereinafter mentioned)	0	3
OUTWARDS. —For every ship or other vessel which shall depart from the said dock to any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney, and Sark, per ton measurement	0	2
To any other part of Europe, except places within the Straits of Gibraltar and round the North Cape, per ton measurement	0	5
To any port or place in Europe, round the North Cape, or any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa, per ton measurement	0	7
To any port or place in British America, any port or place in the United States of America, or any port or place in any other part of the world, per ton measurement	0	10

Newport, continued.

	s.	d.
For every ship or other vessel which shall enter the said dock in ballast, or light, and depart therefrom in ballast, or light, per ton measurement (exclusive of the dues under the name of rent, hereinafter mentioned)	0	3

Police and Watchmen.

For all vessels entering or departing from the dock, at per week, or fractional part of a week	1	0
N.B.—Competent watchmen for the protection of vessels and property therein can be obtained on application at the dock-office, the charge for each watchman is per night	3	6

Rent Charges.

All ships and vessels entering the dock in ballast and departing with cargoes not exceeding 400 tons register measurement, to be allowed to remain at the rates before specified for a period of	2 weeks.	
Above 400 tons and not exceeding 700 tons register measurement	3	„
Above 700 tons register measurement	4	„
Vessels above 70 tons and not exceeding 700 tons register measurement entering with a cargo and going out with another	4	„
Vessels above 700 tons register measurement entering with a cargo and going out with another	5	„
Vessels above 70 tons register measurement, entering with a cargo and going out without breaking bulk, or which shall discharge, and afterwards take on board and depart with the same cargo	3	„
Vessels under 70 tons register measurement, entering the dock without ballast	4 days	
	s.	d.

All ships and vessels which shall remain in the dock for any longer periods than those respectively above stated, shall be subject (in addition to the rates and dues before stated) to a rent charge of, for the first week, or any portion of a week, per ton register measurement.. .. .	0	0½
For the second week or any portion of a week per ton register measurement	0	1
For the third week or any portion of a week per ton register measurement	0	1½
For the fourth week and every subsequent week and for any portion of a week per ton register measurement	0	2
N.B.—In estimating the dues contained in the foregoing schedule, every vessel of less than 20 tons register measurement shall be rated at 20 tons register measurement.		

*Newport, continued.***Use of Machinery for Shipping or Unshipping.**

For every ton of coal	0	1	$\frac{1}{2}$
For every ton of coke, culm, iron cinders, iron ore, earth or rubbish of any kind	0	2	$\frac{1}{4}$
For every ton of metallic (not iron) ore.. .. .	0	3	
Whenever wagons containing any of the above articles are moved on the railway sidings by hydraulic power in connection with the shipping machines, a charge will be made at the rate per ton, of	0	1	
All articles, matters or things not included in the above-mentioned, and excepting ballast, will be subject to special agreement and charges.			
Persons (other than the crews of vessels in the dock), landing or embarking on the Dock Company's premises, will be subject to a charge per head, of	0	1	

Charges for Discharging and Removing Ballast.

For every ton of ballast that is in the hold within 15 feet abaft, and 15 feet before any hatchway	1	0	
For every ton of ballast exceeding in the hold a greater distance than stated above, an additional sum of	0	2	
An additional charge for working by night will be made at the rate of, per ton.. .. .	0	3	

Rates of Pilotage.

From Newport or Pillgwenlly to the mouth of the River Usk, or *vice versa* :

	Coasters per foot. s. d.	Foreign per foot. s. d.
Vessels under 9 feet draught of water ..	0 9	1 0
Vessels drawing 9 feet and under 12 feet. 1	0	1 3
" 12 feet and under 15 feet. 1	3	1 6
" 15 feet and upwards 1	6	2 0

From Newport or Pillgwenlly to Rumney River or Redwick Pill, or any place outside of the River Usk, within the district, or *vice versa* :

Vessels under 9 feet draught of water ..	1 3	1 6
Vessels drawing 9 feet and under 12 feet. 1	6	1 9
" 12 feet and under 15 feet. 1	9	2 0
" 15 feet and upwards 2	0	2 6

From Newport or Pillgwenlly to Pennarth or Kingroad, or *vice versa*, (provided no Bristol Pilot should offer outside the Newport District)

Vessels under 9 feet draught of water ..	1 6	1 9
Vessels drawing 9 feet and under 12 feet. 1	9	2 0
" 12 feet and under 15 feet. 2	0	2 6
" 15 feet and upwards 2	3	3 0

Newport, continued.

Vessels not privileged to pay one-fourth more than British or privileged vessels.

Pilots employed on Tides Work on Board Vessels.

	s.	d.		s.	d.
Under 50 tons	2	0	150 tons and under 200	4	0
50 tons and under 100	2	6	200 tons and under 300	5	0
100 tons and under 150	3	0	300 tons and upwards..	7	6

It is also resolved, that the Haven-Master shall be paid by the masters and commanders, merchants, or owners of ships or vessels, which shall be piloted within the district aforesaid, according to the following rates, viz.:

	s.	d.		s.	d.
Vessels under 50 tons.	0	6	200 tons and under 250	1	6
50 tons and under 100	0	9	250 tons and under 300	2	0
100 tons and under 200	1	0	300 tons and upwards..	2	6

Rules for the Navigation of Steam Vessels.

When steam vessels on different courses must unavoidably or necessarily cross so near, that by continuing their respective courses there would be a risk of coming into collision, each vessel shall put her helm to port, so as always to pass on the larboard side of each other. A steam vessel passing another in a narrow channel, must always leave the vessel she is passing on the larboard hand.

For Pilotage Rates and other Charges upon Vessels, *see also Appendix.*

PEMBREY.**Ballast Rates.**

Wheeling 1d. per ton register.

Every man employed on board to be paid at the rate of three shillings per day.

Each vessel to pay extra for the use of the planks, barrows, and waggons, viz. :—

		s.	d.
Not exceeding	50 tons register	1	0
"	100	1	6
"	150	2	0
"	200	2	6
"	300	3	0
"	350	3	6
"	400	4	0
Exceeding 400	"	4	6

The same charge extra for the use of the crane and tubs if required.

*Pembrey, continued.***Harbour Dues.**

	s.	d.
For every ship, barge, boat, or other vessel, coming in or going out of the harbour, to load or unload, per ton	0	2
For every ship, barge, boat, or other vessel, running into the harbour by stress of weather, and not unloading	0	1
And for every such ship, barge, boat or other vessel, running into the harbour by stress of weather, for shelter, and lying longer than 7 days, the further sum per ton per day of ..	0	0½
For every ship, barge, boat or other vessel, coming into the harbour to seek a freight of whatever tonnage, the sum of ..	1	0

Stemming.

	s.	d.
Vessels not exceeding 20 tons register	0	6
" 50 " 	1	0
" 75 " 	1	6
" 100 " 	2	0
Exceeding 100 " 	2	6

PENNARD.**Keelage, 4d. per ton register.****PORTHCAWL.****Tonnage Rates.**

Coastwise, 2d. per ton register. Foreign, 4d. per ton register.

Ballast.

Not exceeding 15 tons 6d. per ton register

Exceeding 15 tons..... 4d. "

Any ship arriving in tow of a steamer, after having discharged her last cargo at a neighbouring port, shall pay 1s. per ton for discharging her ballast, if not exceeding 15 tons; if exceeding 15 tons, 4d. per ton register tonnage.

Pilotage.

From any place between Sker or Nash Points, and inside the sands into the harbour, and out of the harbour, to every such place:

	£	s.	d.
Per registry under 30 tons	0	4	0
30 and under 40 ".....	0	5	0
40 " 50 ".....	0	6	6
50 " 60 ".....	0	8	0
60 " 75 ".....	0	10	0
75 " 100 ".....	0	12	0
100 " 125 ".....	0	15	0

Porthcawl, continued.

	£	s.	d.
125 and under 150 tons	0	18	0
150 " 175 "	1	2	0
175 " 200 "	1	6	0
200 " 225 "	1	10	0
225 tons and upwards	1	14	0

And for the use of the pilot boat, every ship using the same :

	s.	d.
Per registry under 75 tons	1	0
75 tons and upwards	2	0

For transporting a ship in the harbour and re-mooring her, mooring and unmooring a ship, 1s. 6d. for each pilot, and 9d. each hobbler.

And if any master of a ship shall engage a pilot and hands to his ship out of the harbour, and she is not ready to be taken during that tide, or if after having been moved for the purpose being taken out she does not proceed, 1s. 6d. for each pilot, and for each hobbler or assistant.

PORT TALBOT.

Tonnage Rates.

For every vessel laden 3d. per ton register

For every vessel in ballast.... 4d. ,,

Pilotage.

	From Outer Buoy to destination, if in 1 tide of 3hrs.			To Outer Buoy from berth in 1 tide of 3hrs.		
	£.	s.	d.	£.	s.	d.
Above 25 tons register and under 40..	0	5	0	..	0	4
40 " 50..	0	6	0	..	0	5
50 " 60..	0	7	0	..	0	6
60 " 70..	0	8	0	..	0	6
70 " 80..	0	9	0	..	0	7
80 " 90..	0	10	0	..	0	8
90 " 100..	0	12	0	..	0	9
100 " 120..	0	14	0	..	0	11
120 " 140..	0	16	0	..	0	13
140 " 160..	0	18	0	..	0	14
160 " 180..	1	0	0	..	0	16
180 " 200..	1	5	0	..	1	0
200 " 250..	1	10	0	..	1	3
250 " 300..	2	0	0	..	1	10
300 " 350..	2	15	0	..	2	0
350 " 400..	3	10	0	..	2	11

and for every additional 50 tons 0 5 0 .. 0 4 0

If inside the outer buoy only one-half of the foregoing rates.

Port Talbot, continued.

For transporting a vessel from one part of the harbour to another—under 100 tons, 2s. 6d.—above 100 tons, 5s.

The price paid to hobbler not to exceed 2s. for each hobble; and no hobbler shall charge two hobbles, unless occupied for more than three successive hours.

For every hobbler engaged by the master, 1s. 6d. from sea into the lock, and 2s. from sea to the wharf of her destination; if required to tow, 6d. additional to each hobbler; if engaged only to the end of the breakwater, half the above rates only to be charged.

Steam Tugs.*To or from the Outer Buoy.*

		£	s.	d.
20 tons register and under	....	0	3	0
Above 20 and under 30	.....	0	4	0
30	40	0	5	0
40	50	0	6	0
50	60	0	8	0
60	70	0	9	0
70	80	0	10	6
80	90	0	13	0
90	100	0	15	0
100	120	0	17	0
120	150	1	1	0
150	200	1	5	0
200	250	1	10	0
250	300	2	0	0
300	400	2	10	0
400	500	3	10	0
500	600	4	10	0
and for every additional 50 tons	.....	0	5	0

Stemming fee, 1s.

For use of Harbour Company's tow rope:

	s.	d.
Vessels under 50 tons register burthen	1	6
" of 50 tons and under 100	3	0
" 100 " 200	3	0
" 200 " 300	4	0
" 300 tons and upwards	5	0

Ballast.

Ballast in the river is free of charge: in the dock 3d. per ton.

For use of planks and barrows, for 10 tons and under, 2s.; 10 tons and under 20, 3s. 6d.; and 1s. extra for every 10 tons additional.

For use of the graving bank:—on the hard, 1d. per ton register per week; on the blocks, 1½d. per ton register per week.

SAUNDERSFOOT.

Pilotage.—For every 100 tons in and out, 10s.

Harbour Dues.—2d. per ton register.

Pier Light and Signal.

	s.	d.	
20 to 30 tons register	0	3	each vessel
30 to 50 "	0	6	"
50 to 70 "	0	9	"
70 to 100 "	1	0	"
100 to 150 "	1	6	"
150 tons and upwards	2	0	"

Discharging Ballast.

For each man employed on board 1d. per ton register

For wheeling 1d. "

Trimming.—2d. per ton.

SWANSEA.

Tonnage Rates.

For every Vessel bound from and to any Port or place in the United Kingdom, or the Isle of Man, under 150 tons	per ton	0
150 tons and under 250 tons	per ton	0
250 tons and under 350 tons	per ton	0
350 tons and upwards	per ton	0
For every Vessel bound to or from any Port or place in Europe, or any Port or place within the Straits of Gibraltar, under 100 tons	per ton	0
100 tons and under 250 tons	per ton	0
250 tons and under 350 tons	per ton	0
350 tons and upwards	per ton	0
For every Vessel bound to or from any other Port or place than above specified, under 150 tons	per ton	0
150 tons and under 250 tons	per ton	0
250 tons and under 350 tons	per ton	1
350 tons and upwards	per ton	1

And in respect of Vessels entering in Ballast, and departing with Cargoes, the following Rates.

Vessels bound to Ports in the United Kingdom, or the Isle of Man	per ton	0
Vessels bound to any Port in Europe, or within the Straits of Gibraltar, under 100 tons.....	per ton	0
100 tons and under 250 tons	per ton	0
250 tons and under 350 tons	per ton	0
350 tons and upwards	per ton	0

Swansea, continued.

		s.	d.
Vessels bound to any other Ports, under 150 tons ..	per ton	0	6
150 tons and under 250 tons	per ton	0	7
250 tons and under 350 tons	per ton	0	9
350 tons and upwards.....	per ton	0	11

Vessels driven in by stress of weather, and remaining over four tides, half the above rates. Vessels remaining over thirty days, unless prevented by embargo or weather, 1d. per ton per week.

Craneage.

	s.	d.
For every lift under 1 ton.....	0	3 per lift
Not exceeding 2 tons.....	0	3 per ton
2 to 5 tons	0	6 „
Five tons and upwards	2	0 „

Ballast Rates. •

	s.	d.
Discharged at the Ballast Wharves in the Docks	1	0 per ton
Discharged from any Vessel into another Vessel.....	0	9 „
Discharged at New Cut Wharf, Vessels under 60 tons reg.	0	8 „
Ditto ditto, from 60 tons and upwards.....	0	10 „
Discharged into Lighters	1	6 „
Loaded into any Vessel	0	6 „
Loaded into any Vessel, and discharged therefrom....	1	6 „

Towage,*In or Out, exclusive of Harbour Towses.*

	£	s.	d.		£	s.	d.
Under 50 tons	0	7	6	425 and under	450	3	15 0
50 and under	75	0	10 0	450 „	475	4	0 0
75 „	100	0	12 6	475 „	500	4	5 0
100 „	125	0	15 0	500 „	525	4	10 0
125 „	150	0	17 6	525 „	550	4	15 0
150 „	175	1	0 0	550 „	575	5	0 0
175 „	200	1	5 0	575 „	600	5	5 0
200 „	225	1	10 0	600 „	650	5	10 0
225 „	250	1	15 0	650 „	700	5	15 0
250 „	275	2	0 0	700 „	750	6	0 0
275 „	300	2	5 0	750 „	800	6	5 0
300 „	325	2	10 0	800 „	850	6	10 0
325 „	350	2	15 0	850 „	900	6	15 0
350 „	375	3	0 0	900 „	950	7	0 0
375 „	400	3	5 0	950 „	1000	7	7 0
400 „	425	3	10 0				

All Vessels above 1000 tons, 2d. per ton, new measurement.

If more than one Tug is required, half the above rates will be charged for each additional Tug.

*Swansea, continued.***Pilotage.**

Register Tonnage.			Inwards.			Outwards.			Total.		
			£	s.	d.	£	s.	d.	£	s.	d.
Vessels	50 tons and under	75	0	10	0	0	6	0	0	16	0
Vessels	75 tons and under	100	0	11	0	0	7	0	0	18	0
Vessels	100 tons and under	125	0	12	0	0	8	0	1	0	0
Vessels	125 tons and under	150	0	14	0	0	8	0	1	2	0
Vessels	150 tons and under	175	0	17	0	0	8	0	1	5	0
Vessels	175 tons and under	200	0	19	0	0	8	0	1	7	0
Vessels	200 tons and under	250	1	6	0	0	10	0	1	16	0
Vessels	250 tons and under	300	1	12	0	0	12	0	2	4	0
Vessels	300 tons and under	350	2	3	0	0	14	6	2	17	6
Vessels	350 tons and under	400	2	10	0	0	17	0	3	7	0
Vessels	400 tons and under	450	2	17	6	1	2	0	3	19	6
Vessels	450 tons and under	500	3	5	0	1	7	0	4	12	0
Vessels	500 tons and under	550	3	10	0	1	12	0	5	2	2
Vessels	550 tons and under	600	3	15	0	1	17	0	5	12	0
Vessels	600 tons and under	650	4	0	0	2	2	0	6	2	0
Vessels	650 tons and under	700	4	5	0	2	7	0	6	12	0
Vessels	700 tons and under	750	4	10	0	2	12	0	7	2	0
Vessels	750 tons and under	800	4	15	0	2	17	0	7	12	0
Vessels	800 tons and under	850	5	0	0	3	2	0	8	2	0
Vessels	850 tons and under	900	5	5	0	3	7	0	8	12	0
Vessels	900 tons and under	950	5	10	0	3	12	0	9	2	0
Vessels	950 tons and under	1000	5	15	0	3	17	0	9	12	0

together with an additional sum of 5s. in respect of every 50 tons above 950 tons, on the Inward Pilotage; and an additional sum of 5s. in respect of every 50 tons above 950 tons, on the Outward Pilotage.

Pilots will take Vessels over 500 tons register, Outward Bound, clear of the Green Grounds, on to the Mumbles Roads; and the above charge includes landing the Pilot in all cases.

One half the above rates only to be paid and payable to every Pilot navigating or assisting any Vessel (not entering Swansea Harbour), within any part of Swansea Bay, or within the limits of the Pilotage Ground hereinafter mentioned.

Vessels of 200 tons and upwards, if boarded beyond the following bearings, shall pay additional Pilotage, as under:—

		West of Oxwich Point, bearing N.N.E. South of Sker Buoy, bearing E.N.E. or W.S.W.			West of Worm's Head, bearing N.N.E.			
			s.	d.		£	s.	d.
Vessels	200 tons and under 300	....	5	0	....	0	6	0
Vessels	300 tons and under 400	....	7	6	....	0	10	0
Vessels	400 tons and under 500	....	10	0	....	0	15	0
Vessels	500 tons and under 600	....	12	6	....	1	0	0
Vessels	600 tons and under 700	....	15	0	....	1	5	0
Vessels	700 tons and upwards	....	18	6	....	1	10	0

Swansea, continued.

OPTIONAL PILOTAGE.—Masters of Vessels under 500 tons register requiring Pilots to take their Vessels to the Mumbles Roads, or clear of the Green Grounds, to pay, in addition to the Outward Pilotage Rates, the following additional rates, including landing:—

	s.	d.
Vessels under 100 tons	4	0
Vessels 100 tons and under 200.....	5	6
Vessels 200 tons and under 300.....	7	6
Vessels 300 tons and under 400.....	9	6
Vessels 400 tons and under 500.....	11	0

Masters of Vessels requiring Pilots to take their Vessels to the Eastern or Western Limits, to pay, in addition to the Outward Rates, the following additional rates, including landing:—

Vessels 300 tons and under 500	£3
Vessels 500 tons and under 700	£4
Vessels 700 tons and under 900	£5
Vessels 900 tons and upwards	£6

The following shall be deemed to be the limits of the Pilotage Ground of Pilots appointed and licensed by the Swansea Harbour Trustees, viz.:—"North of the line of the Nash Lights is one;" and "east of an imaginary line running north and south of a point, four miles westward of the Helwick Light Vessel, placed off the Helwick Shoal, near the Worm's Head, in the County of Glamorgan."

Every Pilot required to remain on board a Vessel, whether inward or outward bound, to be paid by the Master of such Vessel, at the rate of 4s. for every 12 hours, or broken portion of 12 hours, in which such Pilot shall not have earned pilotage or distance-money, in the same Vessel.

Harbour Pilotage,

	s.	d.
Vessels under 100 tons	2	6
Vessels 100 tons and under 200.....	3	6
Vessels 200 tons and under 400.....	5	0
Vessels 400 tons and under 500.....	7	6
Vessels 500 tons and upwards	12	0

If the Master of any Vessel shall require any Pilot to go on board and take his Vessel out of the Harbour, transport or move her, and such Vessel be not ready to be taken out or moved, half the rates last mentioned shall be paid to the Pilot.

Masters of Vessels requiring Hobblers or Boats, to assist in removing Vessels within the Harbour, shall pay each Hobbler employed 2s., and for each Boat, 2s. 6d.

TENBY.**Tonnage Rates.**

Vessels discharging.....	3d. per ton register
Vessels wind bound	1½d. „
Yachts	2d. „ or 6d. per ton yearly
Trawlers	2d. „ or 40s. yearly
Pilot Boats exempt.	

WATCHET.

Harbour Dues.—One halfpenny per ton registered tonnage.

VALUE IN BRITISH CURRENCY

OF

THE MONEYS OF ALL NATIONS.**AMERICA, U.S.**

	£	s.	d.
Eagle	2	1	0
Half Eagle	1	0	6
Dollar	0	4	2

AUSTRIA.

Ducat.....	0	9	4
Silver Florin.....	0	2	0
Dollar.....	0	4	0
Zwanzigr, 20 Kreutzers ...	0	0	8

BELGIUM.

Gold Leopold	0	19	10
— 10 Franc Piece	0	7	10
Silver 5 Franc.....	0	3	11
— 1 Franc.....	0	0	9½

BREMEN.

Louis d'or	0	16	0
Gold Rigshank Dollar	0	3	4
36 Grosas Piece	0	1	6

BRAZILS.

Gold Piece, 6400 Reis	1	15	9
4000 —	1	0	0
Silver ditto, 1200 —	0	4	2
960 —	0	4	1
640 —	0	2	9
320 —	0	1	4
200 —	0	0	8

DENMARK.

	£	s.	d.
Christian d'or	0	16	3
Silver Species	0	4	4
Rigshank Daler	0	2	2
Mark	0	0	4½

EGYPT.

Gold New Sequin	0	10	4
Silver New Piastre.....	0	3	4
— Grush	0	1	2

EAST INDIES.

Gold Mohur	1	9	0
Sicca Rupee.....	0	1	10½

FRANCE.

Gold Napoleon	0	16	0
Silver 5-Franc Piece	0	4	0
— Franc	0	0	9½

GREECE

40-Drachmi Gold Piece ...	1	10	6
Five ditto	0	3	9
1 Drachmi, 100 Leplas	0	0	8½

GERMANY.

Gold Louis d'or	0	16	1
— Ducat	0	9	3
Silver Crown	0	4	4
Florin	0	1	8

HOLLAND.

	£	s.	d.
Gold 10-Florin Piece.....	0	16	6
— Ducat	0	9	3
Silver Florin or Guilder ...	0	1	8

HAMBURG and LUBEC.

Ducat.....	0	9	3
Dollar.....	0	4	4
Mark	0	1	2½

HANOVER, BRUNSWICK, &c.

Gold George d'or Double...	1	12	4
Ditto, Single	0	16	2
Thaler, 30 Groschen	0	2	11

MEXICO.

Gold Doubloon	3	5	0
— Half ditto	1	12	6
— Quarter ditto	0	16	3
— Sixteenth ditto.....	0	4	0
Silver Dollar	0	4	2
— Half ditto	0	2	1
— Quarter ditto	0	1	0½
— Eighth ditto	0	0	6½

NAPLES.

Gold Piece of 30 Ducats ...	5	0	0
Silver Ducat	0	3	4
— Dollar	0	4	0

NORWAY.

Spanish Dollar	0	4	4
Rigsbank Dollar	0	2	2
Mark	0	0	9½

POLAND.

Gold Ducat	0	9	0
Rix Dollar	0	4	0
Florin.....	0	0	5½

PORTUGAL.

Gold Joazeiro, 100 Reis....	1	16	0
Silver Crown, 1000 Reis ...	0	4	8
— Crusado 400 Reis ...	0	2	8

PRUSSIA.

	£	s.	d.
Gold Frederick	0	16	9
Silver Thaler	0	3	0
Silbergroschen	0	0	1½

ROME.

Gold 10-Scudi Piece	2	2	6
Silver Scudo, 10 Paoli	0	4	2
Paoli, 10 Bajocchi	0	0	5

RUSSIA.

Gold Half Imperial	0	16	3
Ducat.....	0	9	2
Silver Rouble	0	3	2

SAXONY.

August d'or	0	16	2
Thaler Specie	0	3	11
— Currency	0	3	0

SPAIN.

Gold Doubloon.....	3	6	6
— Pistole	0	16	6
Silver Dollar.....	0	4	3

SWEDEN.

Gold Ducat	0	9	2
Silver Species	0	4	4
— Half Species.....	0	2	2
Rix Dollar Banco, 48 Sk....	0	1	8

SWITZERLAND.

Gold Double Pistole	1	17	0
Four-Franc Piece	0	4	8
1-Franc do., 10 Batzen.....	0	1	1½

TURKEY.

Gold New Double Sequin...	1	16	0
— Sequin	0	18	0
Spanish Dollar.....	0	4	2
Piastre, 40 Paras.....	0	0	2½

TIDAL CONSTANTS.

By the following Table, the Time of High Water may be found in *Local Mean Time*, for any day of the year, by *adding to or subtracting from* the various Ports of reference.

GREAT BRITAIN.

West Coast, &c.				East Coast, &c.			
		H. M.				H. M.	
St. Ives sub.	1	48	From Pembroke Dock. To Barnstaple or From Bristol	Inverness sub.	1	49	To or from London
Padstow sub.	1	19		Aberdeen sub.	1	7	
Boscastle sub.	1	17		Dundee add	0	25	
Budehaven.. .. sub.	0	58		Perth add	1	28	
Lundy Island .. sub.	1	17		Leith add	0	10	
Barnstable Bridge add	0	41		Berwick add	0	11	
Appledore add	0	11		Blyth add	1	8	
Bideford add	0	20		Tynemouth Bar.. add	1	13	
Minehead sub.	1	12		North Shields .. add	1	16	
Bridgwater Bar .. sub.	0	52		Newcastle add	2	16	
Weston-super-Mare sub.	0	48	To or from Bristol	Sunderland add	1	15	To or from London
Flatholm Island.. sub.	0	48		Seaham add	1	17	
Portishead sub.	0	15		Hartlepool add	1	21	
Kingroad sub.	0	35		Whitby add	1	38	
Chepstow sub.	0	1		Scarborough .. add	2	4	
Carmarthen Bar.. sub.	0	22		Flamborough head add	2	23	
Tenby sub.	0	32		Great Grimsby .. add	3	29	
St Ann's lighthouse sub.	0	36		Hull add	4	19	
Fishguard add	0	24		Goole add	5	37	
Cardigan add	0	29		Lynn add	3	53	
Newquay add	0	58	To or from Liverpool	Yarmouth Road.. sub.	4	52	To Pembroke Dock
Aberystwith add	0	59		Lowestoft sub.	4	10	
Aberdovey add	1	28		Orfordness sub.	2	52	
Port Madoc add	0	58		Margate sub.	2	27	
Caernarvon sub.	2	2		Nore sub.	1	37	
Holyhead sub.	1	24		Chatham sub.	1	5	
Amŵch sub.	1	5		Gravesend sub.	0	57	
Beaumaris sub.	1	3		Woolwich sub.	0	30	
Chester sub.	1	5		London Docks .. sub.	0	10	
Fleetwood sub.	0	23					
Whitehaven sub.	0	21	South Coast.	Ramsgate add	5	12	To Pembroke Dock
Douglas, I. of Man sub.	0	23		Deal add	4	43	
Ramsey sub.	0	23		Folkstone add	4	35	
Peel sub.	0	27		Hastings add	4	21	
Kircudbright .. sub.	0	25		Beachy Head .. add	4	48	
Ardrossan add	0	10		Shoreham add	5	2	
Glasgow add	1	50					

Tidal Constants, continued.

		H. M.			H. M.
Arundel Bar ..	add	5 3	Lyme Regis ..	sub.	0 11
Littlehampton ..	add	5 4	Exmouth ..	sub.	0 11
Chichester ..	add	4 58	Torbay ..	sub.	0 32
Bembridge Point..	add	4 28	Teignmouth ..	sub.	0 32
Portsmouth ..	add	5 9	Dartmouth ..	sub.	0 16
Southampton ..	add	3 58	Devonport ..	sub.	0 49
West Cowes ..	add	4 13	Plymouth Break.	sub.	0 55
Yarmouth ..	add	3 28	Fowey ..	sub.	1 18
Needles Point ..	add	3 14	Mevagizey ..	sub.	1 28
Christchurch ..	add	2 28	Falmouth ..	sub.	1 35
Poole.. ..	add	2 38	Lizard ..	sub.	1 32
Portland ..	add	0 29	Penzance ..	sub.	2 2
Bridport ..	sub.	0 27	Scilly I. (St. Mary)	sub.	2 5

To or from Pembroke Dock.

From Pembroke Dock.

IRELAND.

Skull	sub.	2 30	Tor Point ..	sub.	1 55
Crookhaven ..	sub.	2 23	Lough Larne ..	sub.	0 47
Dummanus Harb.	sub.	2 35	Belfast ..	sub.	0 52
Dunbeacon.. ..	sub.	2 41	Donaghadee ..	sub.	0 22
Black Ball harbour	sub.	2 52	Lough Strangford	sub.	0 42
Castletown ..	sub.	2 18	Warren Point ..	sub.	0 25
Bantry Harbour..	sub.	2 45	Carlingford Bar..	sub.	0 55
West Cove ..	sub.	2 40	Howth Harbour..	sub.	0 26
Valentia Harbour	sub.	2 50	Dublin Bar ..	sub.	0 23
Kilbaba	sub.	2 16	Kingstown ..	sub.	0 25
Kilrush	sub.	1 50	Wicklow ..	sub.	1 6
Carrigaholt.. ..	sub.	1 48	Arklow ..	sub.	2 50
Tarbert	sub.	1 35	Wexford ..	add	0 49
Foyne's Island ..	sub.	0 57	New Ross ..	sub.	0 28
Mellon	sub.	0 31	Waterford (bridge)	sub.	0 26
Limerick	sub.	0 16	Do. (Duncan. Fort)	sub.	1 12
Galway	sub.	1 57	Dunmore ..	sub.	1 5
Roundstone ..	sub.	2 4	Ballinacourty, Dun-		
Achillbeg	sub.	1 18	garven ..	sub.	1 20
Broadhaven Harb.	sub.	1 32	Youghal ..	sub.	1 18
Westport	sub.	1 35	Ballycottin ..	sub.	1 38
Sligo Bay	sub.	1 14	Cork	sub.	1 34
Donegal Harbour	sub.	1 14	Queenstown ..	sub.	1 31
Killibegs	sub.	1 16	Kinsale	sub.	1 49
Lough Rossmore..	sub.	1 12	Courtmaeskerry...	sub.	1 56
Sheephaven ..	sub.	1 0	Castletownsend ..	sub.	2 11
Londonderry ..	add	1 29	Baltimore ..	sub.	2 9
Coleraine	sub.	0 8	Cape Clear ..	sub.	2 32

To or from Pembroke Dock.

From Liverpool.

To or from Pembroke Dock.

Tidal Constants, continued.

FOREIGN AND COLONIAL.

	H. M.		H.
Adelaide, port, Aus. sub.	0 48	Ichabo sub.	5 4
Aden, Arabia .. add	3 13	Jackson, Port .. add	1 4
Auckland add	0 33	Jersey, St. Hellier sub.	0
Bayonne Bar, Fr. sub.	2 47	Malaga add	5 2
Bilbao, Spain .. sub.	3 32	Malo, St. sub.	0 2
Bombay add	5 8	Melbourne sub.	5 1
Bordeaux add	0 18	Moreton Bay add	2 5
Boston, U.S. .. add	4 55	Natal, Port.. .. sub.	2
Botany Bay add	1 43	Nelson, New Zea. add	3 1
Boulogne add	4 53	New York add	1 4
Brest sub.	2 45	Oporto sub.	4
Buenos Ayres .. add	5 28	Ostend add	5 5
Cadiz, Spain .. sub.	4 47	Pernambuco .. sub.	2 9
Calais add	5 17	Philadelphia .. sub.	5 14
Calcutta sub.	4 2	Philip, Port, entr. sub.	5 2
Callao Bay.. .. sub.	0 45	Portland, U.S. .. add	4 53
Canton River, ent. add	3 28	Quebec add	0 6
Charleston, U.S.. add	0 41	Richmond, U.S... sub.	2 4
Cherbourg add	1 17	Rio Janeiro .. sub.	3 32
Copiapo add	1 58	Rochelle sub.	3 1
Coquimbo add	2 36	Royal, Port add	4 28
Delaware, U.S. .. add	1 28	Rotterdam sub.	2 47
Dieppe add	4 34	Rouen.. .. sub.	4 4
Francisco, San .. add	4 2	Savannah, City .. add	1 41
Galle, Point de .. sub.	4 32	Senegal add	3 58
Gambia River .. add	1 38	Singapore add	3 13
Geelong sub.	3 42	Suez Bay sub.	4 32
Gibraltar sub.	4 12	Sydney, Australia add	2 6
Guernsey, St. Peter add	0 16	Table Bay sub.	3 52
Hamburg sub.	1 3	Tangier sub.	4 50
Hong Kong add	3 43	Ushant sub.	3 0
Horn, Cape sub.	2 22	Valparaiso add	3 0

MOON'S RISING AND SETTING.

At four days old it sets at, and shines till, about 10 at night.	16 at a quarter after
5 about 11	17 at half after
6 about 12	18 .....about..... 1
7 at near 1 in the morning.	19 .....about..... 1
14 at full it rises about 6 in the evening.	20 .....about..... 1

THE
BRISTOL CHANNEL
ALMANACK
AND
TIDE TABLES ;
TOGETHER WITH
PORT CHARGES,
PILOTAGE REGULATIONS,
&c., &c.,
FOR THE YEAR
1863.

LONDON:
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SWANSEA:
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TO THE PUBLIC.

THE Publishers of the Bristol Channel Tide Tables and Almanack, in presenting the second year's edition to the Public, beg to say that they have collected the particulars of Port Charges, &c. with as much care as circumstances would permit, but should any errors or omissions be discovered, they will be glad to have them pointed out that they may be corrected in future years; and any suggestions for the improvement of the work will also be gladly received, as it is their desire to make it in every respect as accurate and complete as possible.

Swansea, Nov., 1862.

EXPLANATION.

THE TIDES in this work are calculated for GREENWICH MEAN TIME, and the Height for that tide nearest mid-day at the following places:—

BARNSTAPLE.—The Bar.

BRIDGWATER.—The Bridge. The Time of high water at Bridgwater Bar is about 40 minutes earlier. The depth of water at Cumbwitch Pill is 7 to 8 feet more than in the Tables.

BRISTOL.—Cumberland Gates. The height at Bathurst Gates is 9 feet 2 inches less than in the Tables.

CARDIFF.—East Dock Sill. At the West Dock, the depth is 3 feet less than in the Tables.

GLOUCESTER.—Entrance to the Canal at Sharpness Point.

ILFRACOMBE.—Pier Head.

LLANELLY.—Dock Gates. At Burry Bar the depth of water is 8 feet more than in the Tables.

NEWPORT.—Dock Gates, which are about 40 feet above the bed of the river.

PEMBROKE DOCK.—The heights are the rise above low water at spring tides. The time at St. Ann's Lighthouse, it about 25 minutes earlier.

SWANSEA.—Entrance Channel. The depth of water at New Cut Bridge, is about 3 feet, and at Hafod Works, 6 feet 6 inches less than in the Tables.

The times of high water for London and Liverpool, also the Moon's Transit and Equation of Time are added for the convenience of mariners.

PHASES OF THE MOON.

Full Moon .. 5th, 3h. 32m. a.m. | New Moon .. 19th, 4h. 2m
 Last Quarter.. 13th, 0h. 6m. a.m. | First Quarter. 26th, 4h. 54m

M. D.	WEEK DAYS.	Barnstaple.				Bridgwater.				Bristol							
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.
1	Thursday..	2	40	3	12	22	11	4	30	5	4	9	2	4	10	4	44
2	Friday ..	3	41	4	7	23	8	5	36	6	2	10	1	5	16	5	42
3	Saturday..	4	32	4	52	24	6	6	28	6	49	11	2	6	8	6	29
4	Sunday ..	5	15	5	34	24	10	7	11	7	30	11	7	6	51	7	10
5	Monday..	5	51	6	8	25	6	7	49	8	7	12	5	7	29	7	47
6	Tuesday..	6	25	6	43	25	9	8	23	8	41	12	9	8	3	8	21
7	Wednesday	7	0	7	17	25	11	8	58	9	15	12	11	8	38	8	55
8	Thursday..	7	34	7	50	26	1	9	31	9	45	13	2	9	11	9	25
9	Friday ..	8	7	8	25	26	1	10	0	10	17	13	2	9	41	9	57
10	Saturday..	8	43	8	58	25	8	10	33	10	48	12	7	10	13	10	28
11	Sunday ..	9	15	9	34	25	2	11	0	11	18	12	0	10	41	10	58
12	Monday..	9	53	10	13	24	5	11	36	11	55	11	1	11	16	11	35
13	Tuesday..	10	36	11	0	23	4	..	0	20	9	8	12	0	..	0	2
14	Wednesday	11	30	..	22	10		0	48	1	20	9	1	0	28	1	0
15	Thursday..	0	6	0	50	22	11	2	0	2	42	9	2	1	40	2	22
16	Friday ..	1	36	2	19	23	8	3	25	4	7	10	1	3	5	3	47
17	Saturday..	2	58	3	35	25	4	4	49	5	29	12	2	4	29	5	9
18	Sunday ..	4	8	4	40	27	0	6	3	6	36	14	3	5	43	6	16
19	Monday..	5	10	5	37	28	0	7	6	7	34	15	6	6	46	7	14
20	Tuesday..	6	0	6	25	28	5	7	59	8	23	16	1	7	39	8	33
21	Wednesday	6	49	7	9	28	10	8	47	9	7	16	7	8	27	8	47
22	Thursday..	7	31	7	54	28	7	9	28	9	49	16	3	9	8	9	29
23	Friday ..	8	14	8	33	28	0	10	7	10	24	15	6	9	47	10	4
24	Saturday..	8	51	9	9	26	11	10	41	10	57	14	2	10	21	10	37
25	Sunday ..	9	28	9	47	25	5	11	13	11	30	12	4	10	53	11	10
26	Monday..	10	5	10	25	24	1	11	47	..	10	8	11	27	11	47	2
27	Tuesday..	10	47	11	12	22	8	0	7	0	33	8	10	..	0	13	2
28	Wednesday	11	44	..	21	4		1	0	1	35	7	1	0	41	1	15
29	Thursday..	0	23	1	7	21	1	2	16	2	57	6	10	1	56	2	37
30	Friday ..	1	53	2	37	21	6	3	40	4	25	7	4	3	20	4	5
31	Saturday..	3	13	3	43	22	3	5	6	5	38	8	4	4	46	5	18

The above are in Greenwich Mean Time, if local Time be required,
 Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 10

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 5th, 3h. 32m. a.m. | New Moon .. 19th, 4h. 2m. p.m.
 Last Quarter.. 13th, 0h. 6m. a.m. | First Quarter. 28th, 4h. 54m. p.m.

N. D.	WEEK DAYS.	Cardiff.					Gloucester.					Ilfracombe.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday.	3	58	4	34	23	2	4	55	5	29	19	5	2	50	2	22	16	3
2	Friday ..	5	6	5	32	24	3	6	0	6	27	20	10	3	51	4	17	17	1
3	Saturday..	5	58	6	19	25	6	6	53	7	14	22	4	4	42	5	2	18	0
4	Sunday ..	6	41	7	0	26	1	7	36	7	55	23	1	5	25	5	44	18	6
5	Monday..	7	19	7	37	27	2	8	14	8	32	24	5	6	1	6	18	19	1
6	Tuesday..	7	53	8	11	27	6	8	48	9	6	24	10	6	35	6	53	19	5
7	Wednesday	8	28	8	45	27	10	9	23	9	40	25	3	7	10	7	27	19	7
8	Thursday.	9	1	9	15	28	1	9	56	10	10	25	7	7	44	8	0	19	9
9	Friday ..	9	31	9	47	28	1	10	26	10	42	25	7	8	17	8	35	19	9
10	Saturday..	10	3	10	18	27	5	10	58	11	13	24	9	8	53	9	8	19	3
11	Sunday ..	10	31	10	48	26	7	11	26	11	42	23	9	9	25	9	44	18	9
12	Monday..	11	6	11	25	25	5	12	0	..	22	3	10	3	10	23	17	11	
13	Tuesday..	11	50	..	23	9	0	0	20	0	45	20	2	10	46	11	10	16	9
14	Wednesday	0	18	0	50	23	0	1	13	1	45	19	3	11	40	..	16	2	
15	Thursday.	1	30	2	12	23	2	2	25	3	7	19	5	0	16	1	0	16	3
16	Friday ..	2	55	3	37	24	3	3	50	4	32	20	10	1	46	2	29	17	1
17	Saturday..	4	19	4	59	26	11	5	14	5	54	24	2	3	8	3	45	18	11
18	Sunday ..	5	33	6	6	29	6	6	28	7	1	27	5	4	18	4	50	20	9
19	Monday..	6	36	7	4	31	1	7	31	7	59	29	4	5	20	5	47	21	10
20	Tuesday..	7	29	7	53	31	8	8	24	8	48	30	1	6	10	6	35	22	4
21	Wednesday	8	17	8	37	32	4	9	12	9	32	30	11	6	59	7	19	22	9
22	Thursday.	8	58	9	19	31	11	9	53	10	14	30	5	7	41	8	4	22	6
23	Friday ..	9	37	9	54	31	1	10	32	10	49	29	4	8	24	8	43	21	10
24	Saturday.	10	11	10	27	29	5	11	6	11	22	27	3	9	1	9	19	20	8
25	Sunday ..	10	43	11	0	27	0	11	38	11	55	24	3	9	38	9	57	19	1
26	Monday..	11	17	11	37	24	11	..	0	14	21	7	10	15	10	35	17	7	
27	Tuesday..	..	0	0	32	2	9	0	32	0	58	18	11	10	57	11	22	16	0
28	Wednesday	0	31	1	5	20	7	1	26	2	0	16	3	11	54	..	14	5	
29	Thursday	1	46	2	27	20	3	2	41	3	22	15	10	0	33	1	17	14	3
30	Friday ..	3	10	3	55	20	10	4	5	4	50	16	6	2	3	2	47	14	8
31	Saturday.	4	36	5	8	22	1	5	31	6	3	18	1	3	23	3	53	15	7

The above are in Greenwich Mean Time, if local Time be required for
 Cardiff, *sub.* 13m. —Glo'ster, *sub.* 10m.—Ilfracombe, *sub.* 16m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 5th, 3h. 32m. a.m. | New Moon .. 19th, 4h. 2m. p.m.
 Last Quarter. 13th, 0h. 6m. a.m. | First Quarter. 26th, 4h. 54m. p.m.

M. D.	WEEK DAYS.	Llanelly.					Newport.					Pembroke Dock.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday.	3	25	3	57	16	9	4	10	4	44	21	8	3	25	3	57	16	5
2	Friday ..	4	26	4	52	17	7	5	16	5	42	22	11	4	26	4	52	17	2
3	Saturday..	5	17	5	37	18	6	6	8	6	29	24	4	5	17	5	37	18	0
4	Sunday ..	6	0	6	19	18	11	6	51	7	10	25	0	6	0	6	19	18	4
5	Monday..	6	36	6	53	19	7	7	29	7	47	26	3	6	36	6	53	19	0
6	Tuesday..	7	10	7	28	19	11	8	3	8	21	26	8	7	10	7	28	19	3
7	Wednesday	7	45	8	2	20	1	8	38	8	55	27	1	7	45	8	2	19	5
8	Thursday.	8	19	8	35	20	3	9	11	9	25	27	4	8	19	8	35	19	7
9	Friday ..	8	52	9	10	20	3	9	41	9	57	27	4	8	52	9	10	19	7
10	Saturday..	9	28	9	43	19	9	10	13	10	28	26	7	9	28	9	43	19	2
11	Sunday ..	10	0	10	19	19	3	10	41	10	58	25	6	10	0	10	19	18	8
12	Monday..	10	38	10	58	18	5	11	16	11	35	24	3	10	38	10	58	17	11
13	Tuesday..	11	21	11	46	17	3	12	0	..	22	4	11	21	11	46	16	10	
14	Wednesday	..	0	15	16	8		0	28	1	0	21	6	..	0	15	16	4	
15	Thursday.	0	51	1	35	16	9	1	40	2	22	21	8	0	51	1	35	16	5
16	Friday ..	2	21	3	4	17	7	3	5	3	47	22	11	2	21	3	4	17	2
17	Saturday..	3	43	4	20	19	5	4	29	5	9	26	0	3	43	4	20	18	10
18	Sunday ..	4	53	5	25	21	3	5	43	6	16	28	11	4	53	5	25	20	6
19	Monday..	5	55	6	22	22	4	6	46	7	14	30	9	5	55	6	22	21	6
20	Tuesday..	6	45	7	10	22	10	7	39	8	3	31	5	6	45	7	10	21	11
21	Wednesday	7	34	7	54	23	3	8	27	8	47	32	3	7	34	7	54	22	4
22	Thursday.	8	16	8	39	23	0	9	8	9	29	31	9	8	16	8	39	22	1
23	Friday ..	8	59	9	18	22	4	9	47	10	4	30	9	8	59	9	18	21	6
24	Saturday ..	9	36	9	54	21	2	10	21	10	37	28	10	9	36	9	54	20	5
25	Sunday ..	10	13	10	32	19	7	10	53	11	10	26	1	10	13	10	32	18	11
26	Monday..	10	50	11	10	18	1	11	27	11	47	23	8	10	50	11	10	17	7
27	Tuesday..	11	32	11	57	16	6	..	0	13	21	2	11	32	11	57	16	2	
28	Wednesday	..	0	29	14	11		0	41	1	15	18	8	..	0	29	14	10	
29	Thursday.	1	8	1	52	14	9	1	56	2	37	18	3	1	8	1	52	14	7
30	Friday ..	2	38	3	21	15	2	3	20	4	5	19	0	2	38	3	21	15	0
31	Saturday..	3	58	4	28	16	1	4	46	5	18	20	5	3	58	4	28	15	9

The above are in Greenwich Mean Time, if local Time be required for
 Llanelly, *sub.* 16m.—Newport, *sub.* 12m.—Pembroke Dock, *sub.* 20m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 5th, 3h. 32m. a.m. | New Moon .. 19th, 4h. 2m. p.m.
 Last Quarter.. 18th, 0h. 6m. a.m. | First Quarter. 26th, 4h. 54m. p.m.

D. WEEK M. DAYS.	Swansea.						Liverpool.				London.				Equation of Time.	Moon's Trans- sit.	
	Morn.		Even.		Height.		Morn.		Even.		Morn.		Even.				
	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.	H.	M.			
1 Thurs..	3	15	3	47	16	2	8	49	9	16	11	28	..	3	45	9a32	
2 Friday..	4	16	4	42	17	1	9	40	10	2	0	2	0	30	4	14	10 20
3 Satur..	5	7	5	27	18	2	10	23	10	40	0	55	1	18	4	41	11 9
4 Sunday	5	50	6	9	18	7	11	1	11	19	1	40	1	58	5	9	11 57
5 Mon ..	6	26	6	43	19	5	11	36	11	54	2	17	2	35	5	36	morn.
6 Tues ..	7	0	7	18	19	9	..	0	11	2	52	3	9	6	2	0	44
7 Wednes	7	35	7	52	19	11	0	29	0	46	3	25	3	42	6	29	1 30
8 Thurs..	8	9	8	25	20	2	1	4	1	21	3	59	4	16	6	54	2 14
9 Friday..	8	42	9	0	20	2	1	36	1	52	4	33	4	48	7	19	2 58
10 Satur..	9	18	9	33	19	7	2	10	2	28	5	5	5	23	7	44	3 41
11 Sunday	9	50	10	9	19	0	2	44	3	2	5	41	5	58	8	8	4 25
12 Mon ..	10	28	10	48	18	1	3	23	3	44	6	17	6	39	8	31	5 12
13 Tues ..	11	11	11	36	16	8	4	7	4	36	7	1	7	24	8	54	6 0
14 Wednes	..	0	5	16	1	5	5	9	5	45	7	53	8	25	9	17	6 53
15 Thurs.	0	41	1	25	16	2	6	29	7	13	9	2	9	41	9	88	7 50
16 Friday..	2	11	2	54	17	1	7	53	8	30	10	22	11	4	9	59	8 50
17 Satur..	3	33	4	10	19	2	9	4	9	35	11	43	..	10	19	9	54
18 Sunday	4	43	5	15	21	3	10	3	10	29	0	18	0	50	10	39	10 57
19 Mon ..	5	45	6	12	22	6	10	56	11	22	1	19	1	47	10	58	11 58
20 Tues ..	6	35	7	0	23	1	11	46	..	..	2	13	2	38	11	16	0a56
21 Wednes	7	24	7	44	23	7	0	11	0	35	3	1	3	25	11	33	1 50
22 Thurs..	8	6	8	29	23	3	0	56	1	18	3	48	4	8	11	50	2 41
23 Friday..	8	49	9	8	22	6	1	40	1	59	4	30	4	52	12	6	3 30
24 Satur..	9	26	9	44	21	2	2	18	2	37	5	12	5	31	12	21	4 18
25 Sunday	10	3	10	22	19	4	2	56	3	16	5	51	6	11	12	35	5 4
26 Mon ..	10	40	11	0	17	8	3	37	3	58	6	32	6	54	12	48	5 51
27 Tues ..	11	22	11	47	15	10	4	22	4	52	7	15	7	39	13	1	6 39
28 Wednes	..	0	19	14	1	5	5	24	6	2	8	8	8	40	13	13	7 27
29 Thurs..	0	58	1	42	13	10	6	47	7	28	9	17	9	57	13	24	8 16
30 Friday..	2	28	3	11	14	4	8	7	8	45	10	37	11	19	13	34	9 5
31 Satur..	3	48	4	18	15	4	9	17	9	40	11	58	..	13	43	9	53

Subtract from Mean Time.—Add to Apparent Time.

The above are in Greenwich Mean Time, if local Time be required for
 Swansea, *sub.* 15 m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 3rd, 10h. 25m. p.m. | New Moon .. 18th, 3h. 6m. a.m.
 Last Quarter.. 11th, 10h. 46m. a.m. | First Quarter. 25th, 0h. 34m. p.m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgwater.					Bristol.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Sunday ..	4	8	4	32	23	10	6	3	6	28	10	4	5	43	6	8	22	10
2	Monday..	4	56	5	16	25	0	6	52	7	10	11	9	6	32	6	52	25	0
3	Tuesday..	5	34	5	52	25	7	7	30	7	50	12	6	7	10	7	30	26	0
4	Wednesday	6	7	6	24	26	4	8	6	8	22	13	5	7	46	8	2	27	6
5	Thursday.	6	40	6	56	27	0	8	38	8	54	14	3	8	18	8	34	28	8
6	Friday ..	7	10	7	28	27	1	9	8	9	25	14	5	8	48	9	5	28	10
7	Saturday..	7	43	8	0	27	0	9	40	9	55	14	3	9	20	9	35	28	8
8	Sunday ..	8	17	8	35	26	9	10	10	10	26	14	0	9	50	10	6	28	2
9	Monday..	8	53	9	10	26	1	10	42	10	58	13	2	10	22	10	38	27	0
10	Tuesday..	9	28	9	50	25	0	11	13	11	32	11	9	10	52	11	12	25	1
11	Wednesday	10	11	10	36	24	1	11	53	..	10	8	11	33	12	0	23	4	
12	Thursday.	11	4	11	39	22	9	0	20	0	52	9	0	..	0	32	20	11	
13	Friday ..	..	..	0	23	22	4	1	30	2	16	8	5	1	10	1	56	20	2
14	Saturday..	1	14	2	5	23	2	3	3	3	56	9	6	2	43	3	32	21	8
15	Sunday ..	2	49	3	25	24	9	4	40	5	19	11	6	4	20	5	0	24	7
16	Monday..	4	0	4	28	26	8	5	54	6	24	13	10	5	34	6	4	28	1
17	Tuesday..	4	57	5	23	28	0	6	53	7	10	15	6	6	33	7	0	30	6
18	Wednesday	5	46	6	7	28	5	7	44	8	6	16	1	7	24	7	46	31	2
19	Thursday.	6	29	6	50	28	11	8	28	8	48	16	8	8	8	8	28	32	2
20	Friday ..	7	10	7	28	28	10	9	8	9	25	16	7	8	48	9	5	32	0
21	Saturday..	7	47	8	6	28	2	9	42	10	0	15	9	9	22	9	40	30	10
22	Sunday ..	8	24	8	43	27	1	10	16	10	33	14	5	9	56	10	13	28	10
23	Monday..	8	58	9	15	25	9	10	48	11	0	12	9	10	28	10	41	26	4
24	Tuesday..	9	32	9	50	24	2	11	16	11	32	10	9	10	56	11	12	23	5
25	Wednesday	10	9	10	32	22	7	11	51	..	8	9	11	31	11	54	20	7	
26	Thursday.	11	0	11	34	21	3	0	14	0	47	7	0	..	0	27	18	2	
27	Friday ..	..	..	0	13	20	7	1	25	1	58	6	2	1	5	1	48	16	11
28	Saturday..	0	58	1	45	20	11	2	49	3	33	6	7	2	29	3	13	17	7

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 3rd, 10h. 25m. p.m. | New Moon .. 18th, 3h. 6m. a.m.
 Last Quarter.. 11th, 10h. 46m. a.m. | First Quarter. 25th, 0h. 34m. p.m.

M. D.	WEEK DAYS	Cardiff.				Gloucester.				Ilfracombe.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Sunday ..	5 33	5 58	24 6	6	6 28	6 53	21 1	4 18	4 42	17 4		
2	Monday ..	6 22	6 42	26 5	5	7 17	7 37	23 6	5 6	5 26	18 6		
3	Tuesday ..	7 0	7 20	27 3	3	7 55	8 15	24 7	5 44	6 2	19 2		
4	Wednesday ..	7 36	7 52	28 6	6	8 31	8 47	26 1	6 17	6 34	20 0		
5	Thursday ..	8 8	8 24	29 6	9 3	9 19	9 27	5 6	50 7	6 20	9 9		
6	Friday ..	8 38	8 55	29 8	9 33	9 50	27 7	7 20	7 38	20 10			
7	Saturday ..	9 10	9 25	29 6	10 5	10 20	27 5	7 53	8 10	20 9			
8	Sunday ..	9 40	9 56	29 1	10 35	10 51	26 10	8 27	8 45	20 6			
9	Monday ..	10 12	10 28	28 1	11 7	11 23	25 7	9 3	9 20	19 9			
10	Tuesday ..	10 43	11 2	26 5	11 38	11 57	23 6	9 38	10 0	18 6			
11	Wednesday ..	11 23	11 50	24 11	..	0 18	21 7	10 21	10 46	17 7			
12	Thursday ..	..	0 22	22 10	0 45	1 17	19 0	11 14	11 49	16 2			
13	Friday ..	1 0	1 46	22 3	1 55	2 41	18 4	..	0 33	15 7			
14	Saturday ..	2 33	3 22	23 6	3 28	4 17	19 10	1 24	2 15	16 7			
15	Sunday ..	4 10	4 49	26 0	5 5	5 44	23 0	2 59	3 35	18 4			
16	Monday ..	5 24	5 54	29 0	6 19	6 49	26 9	4 10	4 38	20 4			
17	Tuesday ..	6 23	6 50	31 1	7 18	7 45	29 4	5 7	5 33	21 10			
18	Wednesday ..	7 14	7 36	31 8	8 9	8 31	30 1	5 56	6 17	22 4			
19	Thursday ..	7 58	8 18	32 6	8 53	9 13	31 1	6 39	7 0	22 10			
20	Friday ..	8 38	8 55	32 4	9 33	9 50	30 11	7 20	7 38	22 9			
21	Saturday ..	9 12	9 30	31 4	10 7	10 25	29 8	7 57	8 16	22 0			
22	Sunday ..	9 46	10 3	29 8	10 41	10 58	27 7	8 34	8 53	20 10			
23	Monday ..	10 18	10 31	27 6	11 13	11 26	24 10	9 8	9 25	19 5			
24	Tuesday ..	10 46	11 2	25 0	11 41	11 57	21 9	9 42	10 0	17 8			
25	Wednesday ..	11 21	11 44	22 7	..	0 16	18 9	10 19	10 42	15 11			
26	Thursday ..	..	0 17	20 6	0 39	1 12	16 1	11 10	11 44	14 5			
27	Friday ..	0 55	1 38	19 5	1 50	2 33	14 9	..	0 23	13 8			
28	Saturday ..	2 19	3 3	20 0	3 14	3 58	15 6	1 8	1 55	14 0			

The above are in Greenwich Mean Time, if local Time be required for
 Cardiff, *sub* 13m.—Gloucester, *sub* 10m.—Ilfracombe, *sub* 16m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 3rd, 10h. 25m. p.m. | New Moon .. 18th, 3h. 6m.
 Last Quarter.. 11th, 10h. 46m. a.m. | First Quarter. 25th, 0h. 34m.

M. D.	WEEK DAYS.	Llanelly.					Newport.					Pembroke D.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Sunday ..	4	53	5	17	17	10	5	43	6	8	23	2	4	53	5	17	17	10
2	Monday..	5	41	6	1	19	0	6	32	6	52	25	5	5	41	6	1	19	0
3	Tuesday..	6	19	6	37	19	8	7	10	7	30	26	4	6	19	6	37	19	8
4	Wednesday	6	52	7	9	20	6	7	46	8	2	27	9	6	52	7	9	20	6
5	Thursday.	7	25	7	41	21	3	8	18	8	34	28	11	7	25	7	41	21	3
6	Friday ..	7	55	8	13	21	4	8	48	9	5	29	1	7	55	8	13	21	4
7	Saturday..	8	28	8	45	21	3	9	20	9	35	28	11	8	28	8	45	21	3
8	Sunday ..	9	2	9	20	21	0	9	50	10	6	28	5	9	2	9	20	21	0
9	Monday..	9	38	9	55	20	3	10	22	10	38	27	4	9	38	9	55	20	3
10	Tuesday..	10	13	10	35	19	0	10	52	11	12	25	5	10	13	10	35	19	0
11	Wednesday	10	56	11	21	18	1	11	33	12	0	23	8	10	56	11	21	18	1
12	Thursday.	11	49	..	16	8	..	..	0	32	21	3	11	49	..	16	8	..	0
13	Friday ..	0	24	1	8	16	1	1	10	1	56	20	7	0	24	1	8	16	1
14	Saturday..	1	59	2	50	17	1	2	43	3	32	22	1	1	59	2	50	17	1
15	Sunday ..	3	34	4	10	18	10	4	20	5	0	24	11	3	34	4	10	18	10
16	Monday..	4	44	5	13	20	10	5	34	6	4	28	4	4	44	5	13	20	10
17	Tuesday..	5	42	6	8	22	4	6	33	7	0	30	9	5	42	6	8	22	4
18	Wednesday	6	31	6	52	22	10	7	24	7	46	31	5	6	31	6	52	22	10
19	Thursday.	7	14	7	35	23	4	8	8	8	28	32	5	7	14	7	35	23	4
20	Friday ..	7	55	8	13	23	3	8	48	9	5	32	3	7	55	8	13	23	3
21	Saturday..	8	32	8	51	22	6	9	22	9	40	31	1	8	32	8	51	22	6
22	Sunday ..	9	9	9	28	21	4	9	56	10	13	29	1	9	9	9	28	21	4
23	Monday..	9	43	10	0	19	11	10	28	10	41	26	8	9	43	10	0	19	11
24	Tuesday..	10	17	10	35	18	2	10	56	11	12	23	9	10	17	10	35	18	2
25	Wednesday	10	54	11	17	16	5	11	31	11	54	21	0	10	54	11	17	16	5
26	Thursday.	11	45	..	14	11	..	..	0	27	18	7	11	45	..	14	11	..	0
27	Friday ..	0	19	0	58	14	2	1	5	1	48	17	4	0	19	0	58	14	2
28	Saturday..	1	43	2	30	14	6	2	29	3	13	18	0	1	43	2	30	14	6

The above are in Greenwich Mean Time, if local Time be required for
 Llanelly, *sub.* 16m.—Newport, *sub.* 12m.—Pembroke Dock, *sub.* 20m.
 For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 3rd, 10h. 25m. p.m. | New Moon .. 18th, 3h. 6m. a.m.
 Last Quarter. 11th, 10h. 46m. a.m. | First Quarter. 25th, 0h. 34m. p.m.

M. WEEK D. DAYS.	Swansea.						Liverpool.				London.				Equation of Time.	Moon's Transit.
	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.				
	H.	M.	H.	M.		H.	M.	H.	M.	H.	M.	H.	M.			
1 Sunday	4	43	5	7	17	4	10	3	10	23	0	31	0	57	13 51	10a41
2 Mon ..	5	31	5	51	18	9	10	43	11	2	1	19	1	40	13 59	11 27
3 Tues ..	6	9	6	27	19	6	11	19	11	38	2	1	2	18	14 5	morn.
4 Wednes	6	42	6	59	20	5	11	53	..	..	2	35	2	53	14 11	0 12
5 Thurs..	7	15	7	31	21	3	0	10	0	26	3	8	3	24	14 16	0 56
6 Friday..	7	45	8	3	21	5	0	42	0	57	3	39	3	55	14 21	1 40
7 Satur..	8	18	8	35	21	3	1	15	1	30	4	9	4	27	14 24	2 25
8 Sunday	8	52	9	10	21	0	1	46	2	2	4	42	4	58	14 27	3 10
9 Mon ..	9	28	9	45	20	2	2	20	2	38	5	15	5	33	14 29	3 58
10 Tues ..	10	3	10	25	18	9	2	57	3	16	5	52	6	12	14 30	4 48
11 Wednes	10	46	11	11	17	8	3	40	4	5	6	32	6	57	14 31	5 42
12 Thurs..	11	39	..	..	16	0	4	36	5	13	7	22	7	53	14 30	6 39
13 Friday..	0	14	0	58	15	5	5	56	6	47	8	29	9	12	14 29	7 39
14 Satur..	1	49	2	40	16	6	7	34	8	16	9	57	10	43	14 27	8 40
15 Sunday	3	24	4	0	18	6	8	57	9	28	11	30	..	..	14 25	9 40
16 Mon ..	4	34	5	3	20	10	9	55	10	20	0	10	0	42	14 21	10 39
17 Tues ..	5	32	5	58	22	6	10	45	11	9	1	11	1	37	14 17	11 34
18 Wednes	6	21	6	42	23	1	11	31	11	53	2	2	2	25	14 13	0a27
19 Thurs..	7	4	7	25	23	8	..	..	0	16	2	47	3	8	14 7	1 17
20 Friday..	7	45	8	3	23	7	0	36	0	57	3	30	3	49	14 1	2 6
21 Satur..	8	22	8	41	22	9	1	15	1	33	4	9	4	27	13 54	2 55
22 Sunday	8	59	9	18	21	5	1	52	2	9	4	45	5	4	13 47	3 43
23 Mon ..	9	33	9	50	19	9	2	28	2	44	5	22	5	41	13 39	4 32
24 Tues ..	10	7	10	25	17	9	3	2	3	20	5	58	6	17	13 30	5 20
25 Wednes	10	44	11	7	15	9	3	40	4	3	6	36	6	57	13 21	6 10
26 Thurs..	11	35	..	..	14	0	4	30	5	8	7	20	7	47	13 11	6 59
27 Friday..	0	9	0	48	13	2	5	50	6	37	8	24	9	7	13 1	7 47
28 Satur..	1	33	2	20	13	7	7	20	8	1	9	48	10	29	12 49	8 35

The above are in Greenwich Time, if local Mean Time be required for
 Swansea, *sub.* 15 m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 5th, 2h. 46m. p.m. | New Moon .. 19th, 2h. 37m. p.m.
 Last Quarter. 12th, 6h. 55m. p.m. | First Quarter. 27th, 8h. 59m. a.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgwater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Sunday ..	2 27	3 52	22 1	4 15	4 57	8 2	3 55	4 37	19 9	5 9	5 34	22 5
2	Monday ..	3 35	4 02	23 7	5 29	5 54	10 0	5 9	5 34	22 5	6 40	7 02	27 2
3	Tuesday ..	4 22	4 44	25 0	6 18	6 40	11 9	5 58	6 20	25 1	7 17	7 34	28 1
4	Wednesday ..	5 4	5 23	26 2	7 0	7 20	13 3	6 40	7 02	27 2	8 11	8 27	15 0
5	Thursday ..	5 40	5 56	26 8	7 37	7 54	13 10	7 51	8 7	29 10	8 22	8 39	30 6
6	Friday ..	6 12	6 29	27 7	8 11	8 27	15 0	8 56	9 15	30 5	9 31	9 47	29 3
7	Saturday ..	6 44	7 0	28 0	8 42	8 59	15 5	10 4	10 22	28 0	10 40	10 58	25 11
8	Sunday ..	7 18	7 38	27 11	9 16	9 35	15 5	11 0	11 47	23 8	12 0	12 20	11 7
9	Monday ..	7 56	8 14	27 4	9 51	10 7	14 8	1 0	1 47	20 2	2 34	3 21	21 7
10	Tuesday ..	8 33	8 53	26 7	10 24	10 42	13 9	4 6	4 43	24 7	5 16	5 45	27 7
11	Wednesday ..	9 13	9 34	25 6	11 0	11 18	12 5	6 13	6 37	29 8	7 0	7 22	30 6
12	Thursday ..	10 0	10 25	24 0	11 40	..	10 6	8 2	8 21	16 4	8 20	8 38	31 3
13	Friday ..	10 58	11 28	22 9	0 7	0 40	9 0	9 16	9 32	15 3	9 29	9 44	23 1
14	Saturday ..	..	0 13	22 4	1 19	1 57	8 5	10 20	10 36	12 2	10 32	10 47	23 4
15	Sunday ..	1 4	1 54	23 1	2 54	3 41	9 5	11 24	11 46	9 1	11 4	11 26	21 1
16	Monday ..	2 37	3 11	24 9	4 26	5 3	11 6	12 0	12 7	4	12 50	..	18 7
17	Tuesday ..	3 41	4 9	26 5	5 36	6 5	13 7	1 20	1 6	5	0 23	1 0	17 2
18	Wednesday ..	4 37	5 0	27 6	6 33	6 57	14 11	2 3	2 43	6 7	3 4	3 42	18 10
19	Thursday ..	5 23	5 45	28 0	7 20	7 42	15 6	4 18	4 47	21 8	5 7	5 9	6
20	Friday ..	6 3	6 23	28 8	8 2	8 21	16 4	6 7	6 17	9 6	7 17	7 17	7
21	Saturday ..	6 42	7 0	28 6	8 40	8 58	16 2	8 20	8 38	31 3	9 12	9 30	1
22	Sunday ..	7 18	7 35	27 9	9 16	9 32	15 3	9 29	9 44	23 1	10 3	10 16	25 8
23	Monday ..	7 54	8 10	26 8	9 49	10 4	13 10	10 32	10 47	23 4	11 4	11 26	21 1
24	Tuesday ..	8 28	8 46	25 4	10 20	10 36	12 2	11 50	..	18 7	12 5	12 17	2
25	Wednesday ..	9 4	9 21	24 1	10 52	11 7	10 8	1 43	2 23	17 7	3 4	3 42	18 10
26	Thursday ..	9 41	10 4	22 10	11 24	11 46	9 1	4 18	4 47	21 8	5 7	5 9	6
27	Friday ..	10 27	10 56	21 6	..	0 10	7 4	6 7	6 17	9 6	7 17	7 17	7
28	Saturday ..	11 30	..	20 9	0 43	1 20	6 5	8 20	8 38	31 3	9 12	9 30	1
29	Sunday ..	0 9	0 52	20 11	2 3	2 43	6 7	10 3	10 16	25 8	11 4	11 26	21 1
30	Monday ..	1 35	2 14	21 8	3 24	4 2	7 6	12 5	12 17	2	1 4	1 16	25 8
31	Tuesday ..	2 48	3 14	23 2	4 38	5 7	9 6	1 43	2 23	17 7	3 4	3 42	18 10

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m — Bridgwater, *sub.* 12m. — Bristol, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 5th, 2h. 46m. p.m. | New Moon .. 19th, 2h. 37m. p.m.
 Last Quarter.. 12th, 6h. 55m. p.m. | First Quarter. 27th, 8h. 59m. a.m.

WEEK DAYS.	Cardiff.					Gloucester.					Ilfracombe.				
	Morn.	Even.	Height			Morn.	Even.	Height			Morn.	Even.	Height		
	H. M.	H. M.	F.	I.		H. M.	H. M.	F.	I.		H. M.	H. M.	F.	I.	
1 Sunday ..	3 45	4 27	21	10		4 40	5 22	17	9		2 37	3 15	15	5	
2 Monday..	4 59	5 24	24	2		5 54	6 19	20	8		3 45	4 10	17	0	
3 Tuesday..	5 48	6 10	26	5		6 43	7 5	23	6		4 32	4 54	18	6	
4 Wednesday	6 30	6 50	28	3		7 25	7 45	25	10		5 14	5 33	19	10	
5 Thursday.	7 7	7 24	29	0		8 2	8 19	26	9		5 50	6 6	20	4	
6 Friday ..	7 41	7 57	30	6		8 36	8 52	28	7		6 22	6 39	21	5	
7 Saturday..	8 12	8 29	31	1		9 7	9 24	29	4		6 54	7 10	21	10	
8 Sunday ..	8 46	9 5	31	0		9 41	10 0	29	3		7 28	7 48	21	9	
9 Monday..	9 21	9 37	30	0		10 16	10 32	28	0		8 6	8 24	21	1	
10 Tuesday..	9 54	10 12	28	11		10 49	11 7	26	8		8 43	9 3	20	3	
11 Wednesday	10 30	10 48	27	2		11 25	11 43	24	5		9 23	9 44	19	1	
12 Thursday.	11 10	11 37	24	10		..	0 5	21	6		10 10	10 35	17	5	
13 Friday ..	..	0 10	22	10		0 32	1 5	19	0		11 3	11 38	16	2	
14 Saturday..	0 49	1 37	22	3		1 44	2 32	18	4		..	0 23	15	7	
15 Sunday ..	2 24	3 11	23	5		3 19	4 6	19	9		1 14	2 4	16	6	
16 Monday..	3 56	4 33	26	0		4 51	5 28	23	0		2 47	3 21	18	4	
17 Tuesday..	5 6	5 35	28	7		6 1	6 30	26	3		3 51	4 19	20	2	
18 Wednesday	6 3	6 27	30	4		6 58	7 22	28	5		4 47	5 10	21	4	
19 Thursday.	6 50	7 12	31	1		7 45	8 7	29	4		5 33	5 55	21	10	
20 Friday ..	7 32	7 51	32	0		8 27	8 46	30	6		6 13	6 33	22	7	
21 Saturday..	8 10	8 28	31	9		9 5	9 23	30	2		6 52	7 19	22	5	
22 Sunday ..	8 46	9 2	30	9		9 41	9 57	28	11		7 28	7 45	21	7	
23 Monday..	9 19	9 34	29	0		10 14	10 29	26	9		8 4	8 20	20	4	
24 Tuesday..	9 50	10 6	26	11		10 45	11 1	24	2		8 38	8 56	18	11	
25 Wednesday	10 22	10 37	24	11		11 17	11 32	21	7		9 14	9 31	17	7	
26 Thursday.	10 54	11 16	23	0		11 49	..	19	3		9 51	10 14	16	2	
27 Friday ..	11 40	..	20	10		0 11	0 35	16	6		10 37	11 6	14	8	
28 Saturday..	0 13	0 50	19	8		1 8	1 45	15	1		11 40	..	13	10	
29 Sunday ..	1 33	2 13	20	0		2 28	3 8	15	6		0 19	1 2	14	0	
30 Monday..	2 54	3 32	21	1		3 49	4 27	16	10		1 45	2 24	14	10	
31 Tuesday..	4 8	4 37	23	6		5 3	5 33	19	10		2 58	3 24	16	7	

The above are in Greenwich Mean Time, if local Time be required for
 Cardiff, *sub.* 13m. —Glo'ster, *sub.* 10m.—Ilfracombe, *sub.* 16m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 5th, 2h. 46m. p.m. | New Moon .. 19th, 2h. 37m. p.m.
 Last Quarter.. 12th, 6h. 55m. p.m. | First Quarter. 27th, 8h. 59m. a.m.

M. D.	WEEK DAYS.	Llanelly.				Newport.				Pembroke Dock.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Sunday ..	3	12	3	50	15	11	3	55	4	37	20	1
2	Monday..	4	20	4	44	17	6	5	9	5	34	22	10
3	Tuesday..	5	7	5	29	19	0	5	58	6	20	25	5
4	Wednesday	5	49	6	8	20	4	6	40	7	0	27	6
5	Thursday.	6	25	6	41	20	10	7	17	7	34	28	4
6	Friday ..	6	57	7	14	21	11	7	51	8	7	30	1
7	Saturday..	7	29	7	46	22	4	8	22	8	39	30	9
8	Sunday ..	8	3	8	23	22	3	8	56	9	15	30	8
9	Monday..	8	41	8	59	21	7	9	31	9	47	29	6
10	Tuesday..	9	18	9	38	20	9	10	4	10	22	28	3
11	Wednesday	9	58	10	19	19	7	10	40	10	58	26	3
12	Thursday.	10	44	11	10	17	11	11	20	11	47	23	7
13	Friday ..	11	38	..	..	16	8	..	0	10	21	3	11
14	Saturday..	0	13	0	58	16	1	1	0	1	47	20	7
15	Sunday ..	1	49	2	39	17	0	2	34	3	21	22	0
16	Monday..	3	22	3	56	18	10	4	6	4	43	24	11
17	Tuesday..	4	26	4	54	20	8	5	16	5	45	27	10
18	Wednesday	5	22	5	46	21	10	6	13	6	37	29	11
19	Thursday.	6	8	6	30	22	4	7	0	7	22	30	9
20	Friday ..	6	48	7	8	23	1	7	42	8	0	31	10
21	Saturday .	7	27	7	45	22	11	8	20	8	38	31	6
22	Sunday ..	8	3	8	20	22	1	8	56	9	12	30	4
23	Monday..	8	39	8	55	20	10	9	29	9	44	28	4
24	Tuesday..	9	13	9	31	19	5	10	0	10	16	26	0
25	Wednesday	9	49	10	6	18	1	10	32	10	47	23	8
26	Thursday.	10	26	10	49	16	8	11	4	11	26	21	6
27	Friday ..	11	12	11	41	15	2	11	50	..	19	0	11
28	Saturday..	..	0	15	14	4	4	0	23	1	0	17	7
29	Sunday ..	0	54	1	37	14	6	1	43	2	23	18	0
30	Monday..	2	20	2	59	15	4	3	4	3	42	19	3
31	Tuesday..	3	33	3	59	17	1	4	18	4	47	22	1

The above are in Greenwich Mean Time, if local Time be required for
 Llanelly, *sub.* 16m.—Newport, *sub.* 12m.—Pembroke Dock, *sub.* 20m.

For further explanations, see page 3.

PHASES OF THE MOON.

Fall Moon .. 5th, 2h. 46m. p.m. | New Moon .. 19th, 2h. 37m. p.m.
 Last Quarter.. 12th, 6h. 55m. p.m. | First Quarter. 27th, 8h. 59m. a.m.

D. WEEK M. DAYS.	Swansea.						Liverpool.				London.				Equation of Time.	Moon's Trans- sit.	
	Morn.		Even.		Height.	Morn.		Even.		Morn.		Even.					
	H.	M.	H.	M.		F.	I.	H.	M.	H.	M.	H.	M.	H.	M.	M. s.	H. M.
1 Sunday	3	2	3	40	15	2	8	37	9	10	11	12	11	50	12	38	9a21
2 Mon ..	4	10	4	34	17	0	9	35	9	55	..	0	24	12	26	10 7	
3 Tues ..	4	57	5	19	18	9	10	15	10	33	0	50	1	11	12	13	10 52
4 Wednes	5	39	5	58	20	3	10	51	11	9	1	32	1	51	12	0	11 37
5 Thurs.	6	15	6	31	20	10	11	25	11	42	2	8	2	25	11	46	morn
6 Friday.	6	47	7	4	22	0	11	58	..	..	2	41	2	57	11	32	0 21
7 Satur..	7	19	7	36	22	6	0	15	0	30	3	13	3	29	11	18	1 7
8 Sunday	7	53	8	13	22	5	0	48	1	5	3	43	4	0	11	3	1 55
9 Mon ..	8	31	8	49	21	8	1	25	1	42	4	17	4	37	10	48	2 45
10 Tues ..	9	8	9	28	20	9	1	59	2	18	4	54	5	12	10	33	3 39
11 Wednes	9	48	10	9	19	5	2	38	3	0	5	31	5	52	10	17	4 35
12 Thurs	10	34	11	0	17	6	3	23	3	50	6	15	6	39	10	1	5 33
13 Friday.	11	28	..	16	0	4	22	5	0	7	7	7	39	9	44	6 32	
14 Satur..	0	3	0	48	15	5	5	43	6	37	8	16	9	0	9	27	7 31
15 Sunday	1	39	2	29	16	5	7	25	8	8	9	48	10	34	9	10	8 28
16 Mon ..	3	12	3	46	18	6	8	46	9	15	11	20	11	59	8	53	9 23
17 Tues ..	4	16	4	44	20	7	9	40	10	4	..	0	29	8	36	10 15	
18 Wednes	5	12	5	36	21	11	10	27	10	48	0	55	1	20	8	18	11 6
19 Thurs..	5	58	6	20	22	6	11	9	11	30	1	45	2	5	8	1	11 55
20 Friday.	6	38	6	58	23	4	11	49	..	..	2	25	2	46	7	43	0a44
21 Satur..	7	17	7	35	23	2	0	9	0	28	3	4	3	23	7	25	1 32
22 Sunday	7	53	8	10	22	3	0	47	1	5	3	41	3	59	7	7	2 22
23 Mon ..	8	29	8	45	20	10	1	22	1	40	4	17	4	34	6	48	3 11
24 Tues ..	9	3	9	21	19	2	1	55	2	13	4	52	5	8	6	30	4 1
25 Wednes	9	39	9	56	17	8	2	32	2	50	5	26	5	45	6	12	4 51
26 Thurs..	10	16	10	39	16	1	3	8	3	31	6	5	6	24	5	53	5 40
27 Friday.	11	2	11	31	14	4	3	57	4	25	6	47	7	14	5	36	6 28
28 Satur..	..	0	0	5	13	5	5	3	5	45	7	42	8	19	5	16	7 14
29 Sunday	0	44	1	27	13	7	6	33	7	14	9	2	9	44	4	58	8 0
30 Mon ..	2	10	2	49	14	6	7	52	8	26	10	23	11	3	4	39	8 45
31 Tues ..	3	23	3	49	16	6	8	56	9	18	11	38	..	..	4	21	9 30

Subtract from Mean Time.—Add to Apparent Time.

The above are in Greenwich Mean Time, if local Time be required for
 Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 4th, 4h. 9m. a.m. | New Moon .. 18th, 3h. 5m.
 Last Quarter.. 11th, 1h. 23m. a.m. | First Quarter. 26th, 4h. 8m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgwater.					Bristol.				
		Morn.		Even. Height			Morn.		Even. Height			Morn.		Even.		
		H. M.	H. M. F.	I.			H. M.	H. M. F.	I.			H. M.	H. M. F.	I.		
1	Wednesdy	3 39	4 0 24	9			5 34	5 57 11	6			5 14	5 37 2			
2	Thursday.	4 22	4 42 26	2			6 18	6 38 13	3			5 58	6 18 2			
3	Friday ..	5 2	5 22 27	2			6 58	7 19 14	6			6 38	7 0 2			
4	Saturday..	5 40	6 0 27	7			7 37	7 58 15	0			7 17	7 38 2			
5	Sunday ..	6 16	6 35 28	3			8 14	8 33 15	10			7 54	8 13 3			
6	Monday..	6 55	7 14 28	4			8 53	9 12 15	11			8 33	8 52 3			
7	Tuesday..	7 34	7 54 27	9			9 31	9 49 15	3			9 11	9 29 3			
8	Wednesdy	8 16	8 40 26	10			10 9	10 30 14	1			9 49	10 10 2			
9	Thursday.	9 2	9 26 25	6			10 50	11 11 12	5			10 39	10 51 2			
10	Friday ..	9 54	10 23 24	4			11 36	.. 10 11				11 16	11 45 2			
11	Saturday..	10 51	11 26 23	0			0 5	0 38 9	3			..	0 18 2			
12	Sunday ..	..	0 5 22	8			1 16	1 58 8	10			0 56	1 38 2			
13	Monday..	0 48	1 34 23	3			2 40	3 23 9	7			2 20	3 3 2			
14	Tuesday..	2 13	2 46 24	7			4 0	4 36 11	3			3 40	4 16 2			
15	Wednesdy	3 17	3 45 25	11			5 11	5 40 12	11			4 51	5 20 2			
16	Thursday.	4 10	4 34 26	10			6 6	6 30 14	1			5 46	6 10 2			
17	Friday ..	5 0	5 20 27	6			6 56	7 16 14	11			6 36	6 56 2			
18	Saturday..	5 40	5 57 27	7			7 37	7 56 15	0			7 17	7 36 2			
19	Sunday ..	6 16	6 34 27	6			8 14	8 32 14	11			7 54	8 12 2			
20	Monday..	6 52	7 9 27	1			8 50	9 7 14	5			8 30	8 47 2			
21	Tuesday..	7 27	7 45 26	4			9 24	9 40 13	5			9 4	9 20 2			
22	Wednesdy	8 3	8 21 25	4			9 57	10 14 12	2			9 37	9 54 2			
23	Thursday.	8 41	8 58 24	3			10 31	10 48 10	10			10 11	10 28 2			
24	Friday ..	9 18	9 38 23	2			11 4	11 22 9	6			10 44	11 2 2			
25	Saturday.	10 0	10 25 22	1			11 42	.. 8 2				11 22	11 47 1			
26	Sunday ..	10 52	11 22 21	4			0 7	0 38 7	1			..	0 18 1			
27	Monday..	11 56	.. 21 4				1 12	1 49 7	1			0 52	1 29 1			
28	Tuesday..	0 32	1 8 22	0			2 22	2 58 8	0			2 4	2 38 1			
29	Wednesdy	1 45	2 17 23	2			3 33	4 5 9	6			3 13	3 45 1			
30	Thursday.	2 45	3 9 24	7			4 35	5 2 11	3			4 15	4 42 2			

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 4th, 4h. 9m. a.m. | New Moon .. 18th, 3h. 5m. a.m.
 Last Quarter.. 11th, 1h. 23m. a.m. | First Quarter. 26th, 4h. 8m. a.m.

W. WEEK D. DAYS.	Cardiff.						Gloucester.						Ilfracombe.					
	Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1 Wednesday	5	4	5	27	26	0	5	59	6	22	23	0	3	49	4	10	18	4
2 Thursday	5	48	6	8	28	3	6	43	7	3	25	10	4	32	4	52	19	10
3 Friday	6	28	6	49	29	9	7	23	7	44	27	8	5	12	5	32	20	11
4 Saturday	7	7	7	28	30	6	8	2	8	23	28	7	5	50	6	10	21	5
5 Sunday	7	44	8	3	31	5	8	39	8	55	29	9	6	26	6	45	22	1
6 Monday	8	23	8	42	31	6	9	18	9	37	29	10	7	5	7	24	22	2
7 Tuesday	9	1	9	19	30	9	9	56	10	14	28	11	7	44	8	4	21	7
8 Wednesday	9	39	10	0	29	3	10	34	10	55	27	0	8	26	8	50	20	7
9 Thursday	10	20	10	41	27	2	11	15	11	36	24	5	9	12	9	36	19	1
10 Friday	11	6	11	35	25	3	12	0	..	..	22	1	10	4	10	33	17	10
11 Saturday	..	0	8	23	3	0	0	30	1	3	19	7	11	0	11	36	16	4
12 Sunday	0	46	1	28	22	9	1	41	2	23	18	11	..	0	15	16	0	0
13 Monday	2	10	2	53	23	8	3	5	3	48	20	1	0	58	1	44	16	8
14 Tuesday	3	30	4	6	25	8	4	25	5	1	22	7	1	23	2	56	18	1
15 Wednesday	4	41	5	10	27	10	5	36	6	5	25	3	3	27	3	55	20	6
16 Thursday	5	36	6	0	29	3	6	31	6	55	27	0	4	20	4	44	20	7
17 Friday	6	26	6	46	30	4	7	21	7	41	28	5	5	10	5	30	21	4
18 Saturday	7	7	7	26	30	6	8	2	8	21	28	7	5	50	6	7	21	5
19 Sunday	7	44	8	2	30	4	8	39	8	57	28	5	6	26	6	44	21	4
20 Monday	8	20	8	37	29	8	9	15	9	32	27	7	7	2	7	19	20	10
21 Tuesday	8	54	9	10	28	6	9	49	10	5	26	1	7	37	7	55	20	0
22 Wednesday	9	27	9	44	26	11	10	22	10	39	24	2	8	13	8	31	18	11
23 Thursday	10	1	10	18	25	2	10	56	11	13	21	11	8	51	9	8	17	9
24 Friday	10	34	10	52	23	6	11	29	11	47	19	10	9	28	9	48	16	7
25 Saturday	11	12	11	37	21	10	..	0	7	17	9	10	10	10	10	35	15	5
26 Sunday	..	0	8	20	7	0	0	32	1	3	16	3	11	2	11	32	14	5
27 Monday	0	42	1	19	20	7	1	37	2	14	16	3	..	0	6	14	5	5
28 Tuesday	1	54	2	28	21	8	2	49	3	23	17	7	0	42	1	18	15	3
29 Wednesday	3	3	3	35	23	6	3	58	4	30	19	10	1	55	2	27	16	7
30 Thursday	4	5	4	32	25	8	5	0	5	27	22	7	2	55	3	19	18	1

The above are in Greenwich Mean Time, if local Time be required for
 Cardiff, *sub.* 13m. —Glo'ster, *sub.* 10m. —Ilfracombe, *sub.* 16m.

For further explanations, see page 3.

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PHASES OF THE MOON.

Full Moon .. 4th, 4h. 9m. a.m. | New Moon .. 18th, 3h. 5m. a.m.
 Last Quarter.. 11th, 1h. 23m. a.m. | First Quarter. 26th, 4h. 8m. a.m.

M. D.	WEEK DAYS.	Llanelly.						Newport.						Pembroke Dock.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesdy	4	24	4	46	18	10	5	14	5	37	24	11	4	24	4	46	18	3
2	Thursday.	5	7	5	27	20	4	5	58	6	18	27	6	5	7	5	27	19	8
3	Friday ..	5	47	6	7	21	5	6	38	7	0	29	2	5	47	6	7	20	8
4	Saturday..	6	25	6	44	21	11	7	17	7	38	30	1	6	25	6	44	21	1
5	Sunday ..	7	1	7	20	22	7	7	54	8	13	31	2	7	1	7	20	21	9
6	Monday..	7	40	7	59	22	8	8	33	8	52	31	3	7	40	7	59	21	10
7	Tuesday..	8	19	8	39	22	1	9	11	9	29	30	4	8	19	8	39	21	3
8	Wednesdy	9	1	9	25	21	1	9	49	10	10	28	7	9	1	9	25	20	4
9	Thursday.	9	47	10	11	19	7	10	30	10	51	26	3	9	47	10	11	19	0
10	Friday ..	10	39	11	8	18	4	11	16	11	45	24	0	10	39	11	8	17	10
11	Saturday..	11	36	..	16	10		..	0	18	21	9	11	36	..	16	6		
12	Sunday ..	0	11	0	50	16	6	0	56	1	38	21	2	0	11	0	50	16	2
13	Monday..	1	33	2	19	17	2	2	20	3	3	22	3	1	33	2	19	16	9
14	Tuesday..	2	58	3	31	18	7	3	40	4	16	24	6	2	58	3	31	18	1
15	Wednesdy	4	2	4	30	20	1	4	51	5	20	27	1	4	2	4	30	19	5
16	Thursday.	4	55	5	19	21	1	5	46	6	10	28	7	4	55	5	19	20	4
17	Friday ..	5	44	6	5	21	10	6	36	6	56	29	11	5	44	6	5	21	0
18	Saturday..	6	25	6	42	21	11	7	17	7	36	30	1	6	25	6	42	21	1
19	Sunday ..	7	1	7	19	21	10	7	54	8	12	29	11	7	1	7	19	21	0
20	Monday..	7	37	7	54	21	4	8	30	8	47	29	1	7	37	7	54	20	7
21	Tuesday..	8	12	8	30	20	6	9	4	9	20	27	9	8	12	8	30	19	10
22	Wednesdy	8	48	9	6	19	5	9	37	9	54	26	0	8	48	9	6	18	10
23	Thursday.	9	26	9	43	18	3	10	11	10	28	23	11	9	26	9	43	17	9
24	Friday ..	10	3	10	23	17	1	10	44	11	2	22	1	10	3	10	23	16	8
25	Saturday.	10	45	11	10	15	11	11	22	11	47	20	1	10	45	11	10	15	7
26	Sunday ..	11	37	..	14	11		..	0	18	18	8	11	37	..	14	10		
27	Monday..	0	7	0	41	14	11	0	52	1	29	18	8	0	7	0	41	14	10
28	Tuesday..	1	17	1	53	15	9	2	4	2	38	19	11	1	17	1	53	15	6
29	Wednesdy	2	30	3	2	17	1	3	13	3	45	22	1	2	30	3	2	16	8
30	Thursday.	3	30	3	54	18	7	4	15	4	42	24	6	3	30	3	54	18	1

The above are in Greenwich Mean Time, if local Time be required for
 Llanelly, *sub.* 16m.—Newport, *sub.* 12m.—Pembroke Dock, *sub.* 20m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 4th, 4h. 9m. a.m. | New Moon .. 18th, 3h. 5m. a.m.
 Last Quarter.. 11th, 1h. 23m. a.m. | First Quarter. 26th, 4h. 8m. a.m.

D. WEEK M. DAYS.	Swansea.						Liverpool.				London.				Equation of Time.	Moon's Trans- sit.
	Morn.		Even		Height		Morn.		Even.		Morn.		Even.			
	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.	H.	M.	M. s.	H. M.
1 Wednes	4	14	4	36	18	6	9	39	9	57	0	9	0	32	4 3	10a14
2 Thurs..	4	57	5	17	20	3	10	15	10	31	0	54	1	13	3 44	11 0
3 Friday..	5	37	5	57	21	6	10	49	11	8	1	32	1	49	3 26	11 48
4 Satur..	6	15	6	34	22	0	11	25	11	45	2	6	2	24	3 8	morn.
5 Sunday	6	51	7	10	22	10	..	0	2	2	41	3	0	2	50	0 38
6 Mon ..	7	30	7	49	22	11	0	21	0	41	3	16	3	35	2 33	1 32
7 Tues..	8	9	8	29	22	3	1	0	1	21	3	54	4	13	2 15	2 28
8 Wednes	8	51	9	15	21	1	1	40	2	1	4	33	4	52	1 58	3 27
9 Thurs.	9	87	10	0	19	5	2	25	2	48	5	14	5	38	1 41	4 27
10 Friday.	10	29	10	58	17	11	3	14	3	45	6	3	6	30	1 24	5 26
11 Satur..	11	26	12	0	16	3	4	19	4	58	7	2	7	36	1 8	6 23
12 Sunday	..	0	40	15	10	5	40	6	27	8	14	8	57	0	52	7 18
13 Mon ..	1	23	2	9	16	7	7	11	7	51	9	39	10	20	0 36	8 10
14 Tues..	2	48	3	21	18	3	8	25	8	54	11	2	11	37	0 20	9 0
15 Wednes	3	52	4	20	19	11	9	21	9	44	..	0	7	0	6	9 48
16 Thurs..	4	45	5	9	21	1	10	5	10	25	0	35	0	59	0 9	10 36
17 Friday.	5	34	5	55	21	11	10	47	11	6	1	21	1	42	0 24	11 24
18 Satur..	6	15	6	32	22	0	11	25	11	43	2	4	2	22	0 38	0a12
19 Sunday	6	51	7	9	21	11	..	0	2	2	41	2	58	0	51	1 2
20 Mon ..	7	27	7	44	21	5	0	20	0	38	3	16	3	34	1 4	1 52
21 Tues..	8	2	8	20	20	5	0	56	1	14	3	51	4	8	1 17	2 42
22 Wednes	8	38	8	56	19	2	1	31	1	49	4	26	4	43	1 30	3 32
23 Thurs..	9	16	9	33	17	10	2	6	2	26	5	1	5	19	1 41	4 20
24 Friday.	9	53	10	13	16	6	2	45	3	5	5	89	5	59	1 53	5 8
25 Satur..	10	35	11	0	15	2	3	28	3	52	6	21	6	44	2 4	5 53
26 Sunday	11	27	11	57	14	1	4	22	4	58	7	9	7	39	2 14	6 38
27 Mon ..	..	0	31	14	1	5	35	6	17	8	14	8	52	2	27	7 22
28 Tues..	1	7	1	43	15	0	6	55	7	29	9	30	10	5	2 34	8 6
29 Wednes	2	20	2	52	16	6	8	1	8	29	10	38	11	12	2 43	8 51
30 Thurs.	3	20	3	44	18	3	8	53	9	14	11	41	..	2	52	9 37

Subtract from Mean.

Add to Mean Time.

The above are in Greenwich Mean Time, if local Time be required for
 Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 3rd, 2h. 52m. p.m. | New Moon .. 17th, 4h. 48m. p.m.
 Last Quarter.. 10th, 7h. 15m. a.m. | First Quarter. 25th, 8h. 47m. p.m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgwater.					Bristol.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	3	35	4	0	25	11	5	29	5	54	12	11	5	9	5	34	26	9
2	Saturday..	4	23	4	47	27	0	6	20	6	43	14	3	6	0	6	23	28	8
3	Sunday ..	5	10	5	32	27	10	7	6	7	28	15	4	6	46	7	8	30	3
4	Monday..	5	53	6	16	28	1	7	51	8	14	15	8	7	31	7	54	30	8
5	Tuesday..	6	38	7	0	28	2	8	36	8	57	15	9	8	16	8	37	30	10
6	Wednesdy	7	21	7	46	27	11	9	18	9	41	15	5	8	58	9	21	30	5
7	Thursday.	8	10	8	35	27	2	10	4	10	26	14	6	9	44	10	6	28	11
8	Friday ..	9	0	9	25	25	11	10	48	11	9	12	11	10	28	10	49	26	9
9	Saturday..	9	51	10	18	24	10	11	33	12	0	11	7	11	13	11	40	24	8
10	Sunday ..	10	45	11	15	23	8	..	0	30	10	1	..	0	10	22	6	..	..
11	Monday..	11	46	..	..	23	0	1	4	1	38	9	3	0	44	1	18	21	4
12	Tuesday..	0	19	1	0	23	2	2	13	2	50	9	6	1	53	2	30	21	8
13	Wednesday	1	39	2	13	23	9	3	27	4	0	10	3	3	7	3	40	22	9
14	Thursday.	2	42	3	12	24	11	4	32	5	4	11	8	4	12	4	44	24	10
15	Friday ..	3	17	4	6	25	9	5	11	6	0	12	9	4	51	5	41	26	4
16	Saturday..	4	29	4	55	26	2	6	25	6	51	13	3	6	5	6	31	27	2
17	Sunday ..	5	17	5	38	26	3	7	13	7	35	13	4	6	53	7	15	27	4
18	Monday..	5	56	6	15	26	4	7	54	8	13	13	5	7	34	7	53	27	6
19	Tuesday..	6	32	6	50	26	3	8	30	8	48	13	4	8	10	8	28	27	4
20	Wednesday	7	7	7	26	25	10	9	5	9	23	12	10	8	45	9	3	26	6
21	Thursday.	7	45	8	2	25	4	9	40	9	56	12	2	9	20	9	36	25	8
22	Friday ..	8	21	8	39	24	8	10	14	10	29	11	4	9	54	10	9	24	5
23	Saturday..	8	56	9	15	23	11	10	45	11	0	10	5	10	25	10	41	23	0
24	Sunday ..	9	37	9	57	23	2	11	20	11	39	9	6	11	0	11	19	21	8
25	Monday..	10	18	10	40	22	6	12	0	..	8	8	11	40	..	20	6	..	..
26	Tuesday..	11	6	11	34	22	0	0	25	0	54	8	0	0	5	0	34	19	6
27	Wednesdy	..	0	0	6	22	2	1	25	2	0	8	3	1	5	1	39	19	11
28	Thursday.	0	38	1	14	22	9	2	30	3	3	9	0	2	10	2	43	20	11
29	Friday ..	1	47	2	17	23	10	3	35	4	5	10	4	3	15	3	45	22	10
30	Saturday..	2	46	3	15	25	2	4	36	5	8	12	0	4	16	4	48	25	3
31	Sunday ..	3	44	4	12	26	6	5	39	6	8	13	8	5	19	5	48	27	9

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 3rd, 2h. 52m. p.m. | New Moon .. 17th, 4h. 48
 Last Quarter. 10th, 7h. 15m. a.m. | First Quarter. 25th, 8h. 47

M. D.	WEEK DAYS.	Llanelly.					Newport.					Pembroke			
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.	
		H.	M.	H.	M.	F.	H.	M.	H.	M.	F.	H.	M.	H.	M.
1	Friday ..	4	20	4	44	20	5	9	5	34	27	4	20	4	44
2	Saturday..	5	8	5	32	21	6	0	6	23	28	5	8	5	32
3	Sunday ..	5	55	6	17	22	6	46	7	8	30	5	55	6	17
4	Monday..	6	38	7	1	22	7	31	7	54	30	6	38	7	1
5	Tuesday..	7	23	7	44	22	8	16	8	37	31	7	23	7	44
6	Wednesday	8	6	8	31	22	8	58	9	21	30	8	6	8	31
7	Thursday.	8	55	9	20	21	9	44	10	6	29	8	55	9	20
8	Friday ..	9	44	10	10	20	10	28	10	49	27	9	44	10	10
9	Saturday..	10	36	11	3	18	11	13	11	40	25	10	36	11	3
10	Sunday ..	11	30	12	0	17	..	0	10	22	11	11	30	12	0
11	Monday..	..	..	0	31	16	0	44	1	18	21	..	..	0	31
12	Tuesday..	1	4	1	44	17	1	53	2	30	22	1	4	1	44
13	Wednesday	2	24	2	58	17	3	7	3	40	23	2	24	2	58
14	Thursday.	3	27	3	57	19	4	12	4	44	25	3	27	3	57
15	Friday ..	4	2	4	51	19	4	51	5	41	26	4	2	4	51
16	Saturday..	5	14	5	40	20	6	5	6	31	27	5	14	5	40
17	Sunday ..	6	2	6	23	20	6	53	7	15	27	6	2	6	23
18	Monday..	6	41	7	0	20	7	34	7	53	27	6	41	7	0
19	Tuesday..	7	17	7	35	20	8	10	8	28	27	7	17	7	35
20	Wednesday	7	52	8	11	20	8	45	9	3	26	7	52	8	11
21	Thursday.	8	30	8	47	19	9	20	9	36	26	8	30	8	47
22	Friday ..	9	6	9	24	18	9	54	10	9	24	9	6	9	24
23	Saturday..	9	41	10	0	17	10	25	10	41	23	9	41	10	0
24	Sunday ..	10	22	10	42	17	11	0	11	19	22	10	22	10	42
25	Monday..	11	3	11	25	16	11	40	..	20	11	11	3	11	25
26	Tuesday..	11	51	..	15	9	0	5	0	34	19	11	51	..	15
27	Wednesday	0	19	0	51	18	1	5	1	39	20	0	19	0	51
28	Thursday.	1	23	1	59	16	2	10	2	43	21	1	23	1	59
29	Friday ..	2	32	3	2	17	3	15	3	45	23	2	32	3	2
30	Saturday..	3	31	4	0	19	4	16	4	48	25	3	31	4	0
31	Sunday ..	4	29	4	57	20	5	19	5	48	28	4	29	4	57

The above are in Greenwich Mean Time, if local Time be required for
 Llanelly, *sub.* 16m.—Newport, *sub.* 12m.—Pembroke Dock, *sub.* 20m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 3rd, 2h. 52m. p.m. | New Moon .. 17th, 4h. 48m. p.m.
 Last Quarter.. 10th, 7h. 16m. a.m. | First Quarter. 25th, 8h. 47m. p.m.

WEEK DAYS.	Swansea.						Liverpool.				London.				Equation of Time.	Moon's Transit.	
	Morn.		Even.		Height.	Morn.		Even.		Morn.		Even.					
	H.	M.	H.	M.		H.	M.	H.	M.	H.	M.	H.	M.				
1 Friday.	4	10	4	34	19	11	9	35	9	55	0	6	0	28	3	0	10a27
2 Satur..	4	58	5	22	21	3	10	16	10	35	0	50	1	11	3	7	11 19
3 Sunday	5	45	6	7	22	4	10	56	11	17	1	33	1	53	3	14	morn.
4 Mon ..	6	28	6	51	22	8	11	39	..	..	2	13	2	33	3	21	0 16
5 Tues..	7	13	7	34	22	9	0	2	0	24	2	54	3	16	3	27	1 15
6 Wednes	7	56	8	21	22	5	0	45	1	8	3	37	3	58	3	32	2 17
7 Thurs..	8	45	9	10	21	6	1	32	1	55	4	20	4	44	3	37	3 18
8 Friday.	9	34	10	0	19	11	2	20	2	45	5	8	5	33	3	41	4 18
9 Satur..	10	26	10	55	18	7	3	12	3	41	5	59	6	28	3	45	5 14
10 Sunday	11	20	11	50	17	1	4	13	4	49	6	58	7	30	3	48	6 7
11 Mon ..	..	..	0	21	16	3	5	26	6	5	8	5	8	43	3	50	6 57
12 Tues ..	0	54	1	34	16	6	6	44	7	21	9	20	9	54	3	52	7 45
13 Wednes	2	14	2	48	17	3	7	55	8	25	10	30	11	6	3	53	8 33
14 Thurs..	3	17	3	47	18	8	8	51	9	16	11	37	..	..	3	54	9 20
15 Friday.	3	52	4	41	19	9	9	21	10	0	0	4	0	30	3	53	10 7
16 Satur..	5	4	5	30	20	3	10	21	10	42	0	35	1	17	3	53	10 56
17 Sunday	5	52	6	13	20	4	11	3	11	23	1	38	2	0	3	52	11 45
18 Mon ..	6	31	6	50	20	5	11	42	12	0	2	19	2	39	3	50	0a35
19 Tues ..	7	7	7	25	20	4	..	..	0	18	2	57	3	15	3	48	1 25
20 Wednes	7	42	8	0	19	10	0	36	0	54	3	32	3	49	3	45	2 14
21 Thurs..	8	20	8	37	19	2	1	13	1	31	4	6	4	25	3	42	3 2
22 Friday.	8	56	9	14	18	4	1	48	2	6	4	43	5	0	3	38	3 48
23 Satur..	9	31	9	50	17	5	2	24	2	42	5	19	5	37	3	33	4 33
24 Sunday	10	12	10	32	16	6	3	2	3	26	5	56	6	17	3	29	5 16
25 Mon ..	10	53	11	15	15	8	3	48	4	13	6	42	7	5	3	23	6 0
26 Tues ..	11	41	..	..	15	0	4	42	5	16	7	30	7	59	3	17	6 43
27 Wednes	0	9	0	41	15	3	5	50	6	28	8	32	9	7	3	11	7 28
28 Thurs..	1	13	1	49	16	0	7	0	7	34	9	40	10	11	3	4	8 14
29 Friday.	2	22	2	52	17	4	8	3	8	29	10	43	11	14	2	57	9 5
30 Satur..	3	21	3	50	19	0	8	54	9	19	11	41	..	..	2	49	9 59
31 Sunday	4	19	4	47	20	8	9	43	10	6	0	7	0	33	2	41	10 57

Add to Mean Time.—Subtract from Apparent Time.

Add to Mean Time. Subtract from Apparent Time.

The above are in Greenwich Time, if local Mean Time be required for
 Swansea, *sub.* 15 m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 1st, 11h. 30m. p.m. | New Moon .. 16th, 7h. 36m. a.m.
 Last Quarter. 8th, 1h. 52m. p.m. | First Quarter. 24th, 10h. 31m. a.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgwater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Monday..	4	40	5	6	27	6	6	36	7	3	14	11
2	Tuesday..	5	34	5	57	27	10	7	30	7	56	15	4
3	Wednesdy	6	24	6	48	28	2	8	22	8	46	15	9
4	Thursday.	7	12	7	36	28	1	9	10	9	33	15	8
5	Friday ..	8	2	8	27	27	8	9	56	10	19	15	1
6	Saturday..	8	52	9	17	26	9	10	41	11	2	14	0
7	Sunday ..	9	40	10	5	25	8	11	14	11	47	12	7
8	Monday..	10	29	10	53	24	9	..	0	11	11	6	11
9	Tuesday..	11	19	11	50	23	4	0	39	1	9	9	8
10	Wednesdy	..	0	19	22	9	1	42	2	13	9	0	1
11	Thursday	0	54	1	30	22	10	2	45	3	18	9	1
12	Friday ..	2	5	2	38	23	5	3	52	4	27	9	10
13	Saturday..	3	11	3	38	24	3	5	3	5	33	10	10
14	Sunday ..	4	5	4	30	24	11	6	0	6	26	11	8
15	Monday..	4	55	5	16	25	6	6	51	7	12	12	5
16	Tuesday..	5	37	5	57	26	1	7	34	7	56	13	2
17	Wednesdy	6	16	6	34	26	3	8	14	8	32	13	4
18	Thursday.	6	52	7	8	25	9	8	50	9	6	12	9
19	Friday ..	7	25	7	42	25	7	9	22	9	39	12	6
20	Saturday .	8	0	8	18	25	4	9	55	10	11	12	2
21	Sunday ..	8	36	8	53	25	0	10	27	10	42	11	9
22	Monday..	9	11	9	29	24	5	10	58	11	13	11	1
23	Tuesday..	9	48	10	8	23	10	11	31	11	50	10	4
24	Wednesdy	10	29	10	52	23	1	..	0	11	9	5	11
25	Thursday.	11	15	11	44	22	6	0	38	1	5	8	8
26	Friday ..	..	0	15	22	6	1	36	2	9	8	8	1
27	Saturday..	0	54	1	32	23	0	2	45	3	20	9	3
28	Sunday ..	2	8	2	40	24	4	3	56	4	30	10	11
29	Monday..	3	15	3	47	25	11	5	8	5	42	12	11
30	Tuesday..	4	18	4	48	27	3	6	13	6	44	14	7

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

Fall Moon .. 1st, 11h. 30m. p m. | New Moon .. 16th, 7h. 36m. a.m.
 Last Quarter. 8th, 1h. 52m. p.m. | First Quarter. 24th, 10h. 31m. a.m.

M. D.	WEEK DAYS	Cardiff.				Gloucester.				Ilfracombe.			
		Morn.	Even.	Height		Morn.	Even.	Height		Morn.	Even.	Height	
		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.	
1	Monday..	6 6	6 33	30 4		7 1	7 28	28 5		4 50	5 16	21 4	
2	Tuesday..	7 0	7 26	30 10		7 55	8 21	29 0		5 44	6 7	21 8	
3	Wednesday	7 52	8 16	31 4		8 47	9 11	29 8		6 34	6 58	22 0	
4	Thursday..	8 40	9 3	31 3		9 35	9 58	29 7		7 22	7 46	22 0	
5	Friday ..	9 26	9 49	30 7		10 21	10 44	28 9		8 12	8 37	21 5	
6	Saturday..	10 11	10 32	29 1		11 6	11 27	26 10		9 2	9 27	20 6	
7	Sunday ..	10 54	11 17	27 5		11 49	..	24 9		9 50	10 15	19 3	
8	Monday..	11 41	..	26 0		0 12	0 36	23 0		10 39	10 53	18 4	
9	Tuesday..	0 9	0 39	23 9		1 5	1 34	20 2		11 29	12 0	16 9	
10	Wednesday	1 12	1 43	22 10		2 7	2 38	19 0		..	0 29	16 2	
11	Thursday..	2 15	2 48	23 0		3 10	3 43	19 3		1 4	1 40	16 2	
12	Friday ..	3 22	3 57	23 11		4 17	4 52	20 5		2 15	2 48	16 10	
13	Saturday..	4 33	5 3	25 2		5 28	5 58	21 11		3 21	3 38	17 9	
14	Sunday ..	5 30	5 56	26 6		6 25	6 51	23 4		4 15	4 40	18 6	
15	Monday..	6 21	6 42	27 2		7 16	7 37	24 5		4 55	5 26	19 1	
16	Tuesday..	7 4	7 26	28 1		7 59	8 21	25 7		5 47	6 7	19 9	
17	Wednesday	7 44	8 2	28 4		8 39	8 57	25 11		6 26	6 44	19 11	
18	Thursday..	8 20	8 36	27 6		9 15	9 31	24 10		7 2	7 18	19 5	
19	Friday ..	8 52	9 9	27 3		9 47	10 4	24 7		7 35	7 52	19 2	
20	Saturday..	9 25	9 41	26 11		10 20	10 36	24 2		8 10	8 28	18 11	
21	Sunday ..	9 57	10 12	26 5		10 52	11 7	23 6		8 46	9 3	18 6	
22	Monday..	10 28	10 43	25 5		11 23	11 38	22 3		9 21	9 29	17 11	
23	Tuesday..	11 1	11 20	24 6		11 56	..	21 1		9 58	10 18	17 4	
24	Wednesday	11 41	..	23 5		0 15	0 36	19 9		10 29	11 2	16 6	
25	Thursday..	0 8	0 35	22 6		1 3	1 30	18 7		11 25	11 54	15 10	
26	Friday ..	1 6	1 39	22 6		2 1	2 34	18 7		..	0 25	15 10	
27	Saturday..	2 15	2 50	23 3		3 10	3 45	19 7		1 4	1 42	16 4	
28	Sunday ..	3 26	4 0	25 3		4 21	4 55	22 1		2 18	2 50	17 10	
29	Monday..	4 38	5 12	27 10		5 33	6 7	25 3		3 25	3 57	19 7	
30	Tuesday..	5 43	6 14	29 11		6 38	7 9	27 11		4 28	4 58	21 0	

The above are in Greenwich Mean Time, if local Time be required for
 Cardiff, *sub* 13m.—Gloucester, *sub* 10m.—Ilfracombe, *sub* 16m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 1st, 11h. 30m. p.m. | New Moon .. 16th, 7h. 36
 Last Quarter.. 8th, 1h. 52m. p.m. | First Quarter. 24th, 10h. 31

M. D.	WEEK DAYS.	Llanelly.					Newport.					Pembroke					
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.
1	Monday..	5	25	5	51	21	10	6	16	6	43	29	11	5	25	5	5
2	Tuesday..	6	19	6	42	22	2	7	10	7	36	30	6	6	19	6	4
3	Wednesday	7	9	7	33	22	6	8	2	8	26	31	1	7	9	7	3
4	Thursday..	7	57	8	21	22	6	8	50	9	13	30	11	7	57	8	3
5	Friday ..	8	47	9	12	21	11	9	36	10	0	30	2	8	47	9	1
6	Saturday..	9	37	10	2	21	0	10	21	10	42	28	5	9	37	10	2
7	Sunday ..	10	25	10	50	19	9	11	4	11	27	26	7	10	25	10	50
8	Monday..	11	14	11	38	18	10	11	51	..	24	11	11	11	14	11	38
9	Tuesday..	..	0	4	17	3		0	19	0	49	22	4	..	0	4	
10	Wednesday	0	35	1	4	16	8	1	22	1	53	21	3	0	35	1	4
11	Thursday..	1	39	2	15	16	8	2	25	2	58	21	6	1	39	2	15
12	Friday ..	2	50	3	23	17	4	3	32	4	7	22	7	2	50	3	23
13	Saturday..	3	56	4	23	18	3	4	43	5	13	23	11	3	56	4	23
14	Sunday ..	4	50	5	15	19	0	5	40	6	6	25	2	4	50	5	15
15	Monday..	5	40	6	1	19	7	6	31	6	52	26	3	5	40	6	1
16	Tuesday..	6	22	6	42	20	3	7	14	7	36	27	4	6	22	6	42
17	Wednesday	7	1	7	19	20	5	7	54	8	12	27	7	7	1	7	19
18	Thursday..	7	37	7	53	19	11	8	30	8	46	26	8	7	37	7	53
19	Friday ..	8	10	8	27	19	8	9	2	9	19	26	4	8	10	8	27
20	Saturday ..	8	45	9	3	19	5	9	35	9	51	26	0	8	45	9	3
21	Sunday ..	9	21	9	38	19	0	10	7	10	22	25	5	9	21	9	38
22	Monday..	9	56	10	14	18	5	10	38	10	52	24	3	9	56	10	14
23	Tuesday..	10	33	10	53	17	10	11	11	11	30	23	2	10	33	10	53
24	Wednesday	11	14	11	36	17	0	11	51	..	22	0	11	11	14	11	36
25	Thursday..	12	0	..	16	4		0	18	0	45	20	11	12	0	..	
26	Friday ..	0	29	1	0	16	4	1	16	1	49	20	11	0	29	1	0
27	Saturday..	1	39	2	17	16	10	2	25	3	0	21	9	1	39	2	17
28	Sunday ..	2	53	3	25	18	4	3	36	4	10	24	0	2	53	3	25
29	Monday..	4	0	4	32	20	1	4	48	5	22	27	1	4	0	4	32
30	Tuesday..	5	3	5	33	21	6	5	53	6	24	29	5	5	3	5	33

The above are in Greenwich Mean Time, if local Time be require
 Llanelly, *sub.* 16m.—Newport, *sub.* 12m.—Pembroke Dock, *sub.*

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 1st, 11h. 30m. p.m. | New Moon .. 16th, 7h. 36m. a.m.
 Last Quarter.. 8th, 1h. 52m. p.m. | First Quarter. 24th, 10h. 31m. a.m.

M. WEEK D. DAYS.	Swansea.						Liverpool.				London.				Equation of Time.	Moon's Trans- sit.
	Morn.		Even.		Height		Morn.		Even.		Morn.		Even.			
	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.	H.	M.		
1 Mon ..	5	15	5	41	21	11	14	29	10	53	0	58	1	23	2 33	11a59
2 Tues ..	6	9	6	32	22	4	11	19	11	43	1	47	2	10	2 24	morn
3 Wednes	7	0	7	23	22	9	..	..	0	10	2	35	2	58	2 14	1 2
4 Thurs..	7	47	8	11	22	8	0	34	1	0	3	24	3	47	2 5	2 5
5 Friday..	8	37	9	2	22	1	1	23	1	48	4	11	4	35	1 55	3 5
6 Satur..	9	27	9	52	21	0	2	12	2	37	5	0	5	25	1 44	4 1
7 Sunday	10	15	10	40	19	7	3	3	3	30	5	51	6	18	1 33	4 53
8 Mon ..	11	4	11	28	18	6	3	58	4	27	6	46	7	15	1 22	5 43
9 Tues ..	11	54	..	16	8	5	5	0	5	32	7	44	8	15	1 11	6 31
10 Wednes	0	25	0	54	16	0	6	10	6	44	8	49	9	24	0 59	7 18
11 Thurs..	1	29	2	5	16	1	7	16	7	48	9	54	10	25	0 47	8 5
12 Friday..	2	40	3	13	16	10	8	18	8	47	10	58	11	30	0 35	8 53
13 Satur..	3	46	4	13	17	10	9	15	9	38	12	0	..	0 23	9 41	
14 Sunday	4	40	5	5	18	8	10	0	10	22	0	29	0	53	0 10	10 31
15 Mon ..	5	30	5	51	19	5	10	42	11	2	1	16	1	39	0 3	11 20
16 Tues ..	6	12	6	32	20	2	11	22	11	43	2	0	2	18	0 16	0a 9
17 Wednes	6	51	7	9	20	4	..	..	0	2	2	38	2	58	0 28	0 58
18 Thurs..	7	27	7	43	19	9	0	20	0	38	3	16	3	34	0 41	1 45
19 Friday..	8	0	8	17	19	6	0	55	1	12	3	51	4	7	0 55	2 30
20 Satur..	8	35	8	53	19	2	1	29	1	46	4	24	4	41	1 8	3 14
21 Sunday	9	11	9	28	18	9	2	3	2	21	4	58	5	16	1 21	3 56
22 Mon ..	6	46	10	4	18	1	2	39	2	58	5	34	5	53	1 34	4 39
23 Tues ..	10	23	10	43	17	4	3	17	3	38	6	13	6	33	1 47	5 22
24 Wednes	11	4	11	26	16	5	4	0	4	27	6	55	7	18	1 59	6 7
25 Thurs..	11	51	..	15	8	4	4	57	5	27	7	44	8	13	2 12	6 54
26 Friday..	0	19	0	50	15	8	6	3	6	40	8	44	9	18	2 25	7 44
27 Satur..	1	29	2	7	16	3	7	16	7	49	9	50	10	25	2 37	8 39
28 Sunday	2	43	3	15	17	11	8	21	8	49	11	0	11	33	2 50	9 39
29 Mon ..	3	50	4	22	19	11	9	19	9	45	..	0	2	..	3 2	10 41
30 Tues ..	4	53	5	23	21	7	10	11	10	36	0	33	1	0	3 14	11 45
															Add to Mean.	
																Subtract from Mean Time.

The above are in Greenwich Time, if local Mean Time be required for
 Swansea, *sub.* 15 m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 1st, 6h. 46m. a.m. | First Quarter. 23rd, 9h. 32
 Last Quarter.. 7th, 10h. 28m. p.m. | Full Moon .. 30th, 1h. 33
 New Moon .. 15th, 10h. 54m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgwater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Morn.	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	5	19	5	46	27	10	7	15	7	44	15	4
2	Thursday	6	12	6	39	28	5	8	11	8	37	16	1
3	Friday	7	4	7	27	28	7	9	2	9	24	16	3
4	Saturday	7	52	8	15	28	4	9	46	10	8	15	11
5	Sunday	8	39	9	1	27	8	10	29	10	49	15	1
6	Monday	9	22	9	43	26	7	11	7	11	26	13	9
7	Tuesday	10	4	10	25	25	2	11	46	..	..	12	0
8	Wednesday	10	46	11	9	23	7	0	7	0	30	10	0
9	Thursday	11	38	..	..	22	4	0	58	1	30	8	5
10	Friday	0	11	0	49	21	10	2	5	2	41	7	10
11	Saturday	1	27	2	5	22	0	3	15	3	52	8	0
12	Sunday	2	42	3	14	23	0	4	32	5	7	9	3
13	Monday	3	45	4	11	23	11	5	40	6	7	10	5
14	Tuesday	4	37	4	58	24	10	6	33	6	55	11	7
15	Wednesday	5	21	5	41	25	2	7	17	7	38	12	0
16	Thursday	5	58	6	13	25	9	7	57	8	12	12	9
17	Friday	6	31	6	48	26	1	8	30	8	46	13	2
18	Saturday	7	4	7	21	26	3	9	2	9	18	13	4
19	Sunday	7	38	7	54	26	2	9	35	9	49	13	3
20	Monday	8	10	8	26	26	0	10	4	10	18	13	0
21	Tuesday	8	44	9	1	25	7	10	34	10	49	12	6
22	Wednesday	9	18	9	38	24	10	11	4	11	21	11	7
23	Thursday	9	58	10	19	24	0	11	40	12	0	10	6
24	Friday	10	41	11	7	23	1	..	..	0	30	9	5
25	Saturday	11	37	..	..	22	6	0	55	1	28	8	8
26	Sunday	0	12	0	55	22	9	2	6	2	46	9	0
27	Monday	1	39	2	21	23	10	3	27	4	10	10	4
28	Tuesday	2	58	3	34	25	5	4	49	5	28	12	4
29	Wednesday	4	7	4	39	27	2	6	2	6	35	14	6
30	Thursday	5	8	5	35	27	11	7	4	7	32	15	5
31	Friday	6	0	6	25	28	9	8	0	8	23	16	6

The above are in Greenwich Mean Time, if local Time be required
 Barnstaple, *sub.* 17m — Bridgwater, *sub.* 12m. — Bristol, *sub.*

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 1st, 6h. 46m. a.m. | First Quarter. 23rd, 9h. 32m. p.m.
 Last Quarter.. 7th, 10h. 28m. p.m. | Full Moon .. 30th, 1h. 33m. p.m.
 New Moon .. 15th, 10h. 54m. p.m.

M. D.	WEEK DAYS.	Cardiff.				Gloucester.				Ilfracombe.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	6	45	7	14	30	10	7	40	8	9	29	0
2	Thursday	7	41	8	7	31	8	8	36	9	2	30	1
3	Friday	8	32	8	54	31	11	9	27	9	49	30	5
4	Saturday	9	16	9	38	31	6	10	11	10	33	29	10
5	Sunday	9	59	10	19	30	7	10	54	11	14	28	9
6	Monday	10	37	10	56	28	11	11	32	11	51	26	8
7	Tuesday	11	16	11	37	26	7	..	0	11	23	9	10
8	Wednesday	12	0	..	24	2	2	0	32	0	56	20	8
9	Thursday	0	28	1	0	22	3	1	23	1	54	18	4
10	Friday	1	35	2	11	21	5	2	30	3	6	17	3
11	Saturday	2	45	3	22	21	8	3	40	4	17	17	7
12	Sunday	4	2	4	37	23	3	4	57	5	32	19	7
13	Monday	5	10	5	37	24	8	6	5	6	32	21	4
14	Tuesday	6	3	6	25	26	1	6	58	7	20	23	1
15	Wednesday	6	47	7	8	26	7	7	42	8	3	23	9
16	Thursday	7	27	7	42	27	6	8	22	8	37	24	10
17	Friday	8	0	8	16	28	1	8	54	9	11	25	7
18	Saturday	8	32	8	48	28	4	9	27	9	43	25	11
19	Sunday	9	5	9	19	28	3	10	0	10	14	25	10
20	Monday	9	34	9	48	28	0	10	29	10	43	25	6
21	Tuesday	10	4	10	19	27	3	10	59	11	14	24	7
22	Wednesday	10	34	10	51	26	1	11	29	11	46	23	1
23	Thursday	11	10	11	30	24	10	..	0	5	21	6	10
24	Friday	11	56	..	23	5	5	0	25	0	55	19	9
25	Saturday	0	25	0	58	22	6	1	20	1	53	18	7
26	Sunday	1	36	2	16	22	10	2	31	3	11	19	0
27	Monday	2	57	3	40	24	6	3	52	4	35	21	1
28	Tuesday	4	19	4	58	27	0	5	14	5	53	24	3
29	Wednesday	5	32	6	5	29	9	6	27	7	0	27	8
30	Thursday	6	34	7	2	31	0	7	29	7	57	29	3
31	Friday	7	30	7	53	32	2	8	25	8	48	30	8

The above are in Greenwich Mean Time, if local Time be required for
 Cardiff, *sub.* 13m. —Glo' ster, *sub.* 10m.—Ilfracombe, *sub.* 16m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 1st, 6h. 46m. a.m. | First Quarter. 23rd, 9h. 32m.
 Last Quarter.. 7th, 10h. 28m. p.m. | Full Moon .. 30th, 1h. 33m.
 New Moon .. 15th, 10h. 54m. p.m.

M. D.	WEEK DAYS.	Llanelly.					Newport.					Pembroke			
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.	
		H. M.	H. M.	F. I.			H. M.	H. M.	F. I.			H. M.	H. M.	F. I.	
1	Wednesdy	6 4	6 31	22 2			6 55	7 24	30 6			6 4	6 31		
2	Thursday.	6 57	7 24	22 10			7 51	8 17	31 5			6 57	7 24		
3	Friday ..	7 49	8 12	23 0			8 42	9 4	31 9			7 49	8 12		
4	Saturday..	8 36	9 0	22 8			9 26	9 48	31 3			8 36	9 0		
5	Sunday ..	9 24	9 46	21 11			10 9	10 29	30 2			9 24	9 46		
6	Monday..	10 7	10 28	20 9			10 47	11 6	28 3			10 7	10 28		
7	Tuesday..	10 49	11 10	19 3			11 26	11 47	25 7			10 49	11 10		
8	Wednesdy	11 31	11 54	17 6			..	0 11	22 10			11 31	11 54		
9	Thursday.	..	0 23	16 1			0 38	1 9	20 7			..	0 23		
10	Friday ..	0 56	1 34	15 7			1 45	2 21	19 8			0 56	1 34		
11	Saturday..	2 12	2 50	15 9			2 55	3 32	19 11			2 12	2 50		
12	Sunday ..	3 27	3 59	16 10			4 12	4 47	21 9			3 27	3 59		
13	Monday..	4 30	4 56	17 10			5 20	5 47	23 4			4 30	4 56		
14	Tuesday..	5 22	5 43	18 11			6 13	6 35	25 0			5 22	5 43		
15	Wednesdy	6 6	6 26	19 3			6 57	7 18	25 7			6 6	6 26		
16	Thursday.	6 43	6 58	19 11			7 37	7 52	26 8			6 43	6 58		
17	Friday ..	7 16	7 33	20 3			8 9	8 26	27 4			7 16	7 33		
18	Saturday..	7 49	8 6	20 5			8 42	8 58	27 7			7 49	8 6		
19	Sunday ..	8 23	8 39	20 4			9 15	9 29	27 6			8 23	8 39		
20	Monday..	8 55	9 11	20 2			9 44	9 58	27 3			8 55	9 11		
21	Tuesday..	9 29	9 46	19 8			10 14	10 29	26 4			9 29	9 46		
22	Wednesdy	10 3	10 23	18 11			10 44	11 0	25 0			10 3	10 23		
23	Thursday.	10 43	11 4	17 11			11 20	11 40	23 7			10 43	11 4		
24	Friday ..	11 26	11 52	17 0			..	0 6	22 0			11 26	11 52		
25	Saturday..	..	0 22	16 4			0 35	1 8	20 11			..	0 22		
26	Sunday ..	0 57	1 40	16 8			1 46	2 26	21 3			0 57	1 40		
27	Monday..	2 24	3 6	17 10			3 7	3 50	23 2			2 24	3 6		
28	Tuesday..	3 43	4 19	19 7			4 29	5 8	26 1			3 43	4 19		
29	Wednesdy	4 52	5 24	21 5			5 42	6 15	29 2			4 52	5 24		
30	Thursday.	5 53	6 20	22 3			6 44	7 12	30 8			5 53	6 20		
31	Friday ..	6 46	7 10	23 2			7 40	8 3	32 0			6 46	7 10		

The above are in Greenwich Mean Time, if local Time be required for
 Llanelly, *sub.* 16m.—Newport, *sub.* 12m.—Pembroke Dock, *sub.* 20m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 1st, 6h. 46m. a.m. | First Quarter. 23rd, 9h. 32m. p.m.
 Last Quarter.. 7th, 10h. 28m. p.m. | Full Moon .. 30th, 1h. 33m. p.m.
 New Moon .. 15th, 10h. 54m. p.m.

D.	WEEK M. DAYS.	Swansea.					Liverpool.				London.				Equation of Time.	Moon's Transit.	
		Morn.		Even.		Height	Morn.		Even.	Morn.		Even.					
		H.	M.	H.	M.		F.	I.		H.	M.		H.	M.			H.	M.
1	Wednes	5	54	6	21	22	4	11	5	11	31	1	28	1	54	3 26	morn.
2	Thurs..	6	47	7	14	23	1	11	58	..	..	2	21	2	47	3 37	0 47
3	Friday..	7	39	8	2	23	3	0	25	0	51	3	13	3	38	3 48	1 47
4	Satur..	8	26	8	49	22	11	1	14	1	37	4	3	4	26	3 59	2 43
5	Sunday	9	14	9	39	22	1	2	0	2	24	4	49	5	13	4 10	3 36
6	Mon ..	9	57	10	18	20	9	2	46	3	9	5	37	6	1	4 20	4 26
7	Tues ..	10	39	11	0	19	0	3	33	3	54	6	25	6	49	4 30	5 15
8	Wednes	11	21	11	44	17	0	4	22	4	50	7	13	7	39	4 40	6 3
9	Thurs ..	..	..	0	13	15	5	5	20	5	55	8	6	8	36	4 49	6 51
10	Friday..	0	46	1	24	14	10	6	35	7	12	9	11	9	46	4 58	7 39
11	Satur..	2	2	2	40	15	0	7	45	8	18	10	21	10	55	5 6	8 28
12	Sunday	3	17	3	49	16	3	8	51	9	18	11	30	..	..	5 14	9 17
13	Mon ..	4	20	4	46	17	5	9	44	10	6	0	4	0	32	5 22	10 6
14	Tues ..	5	12	5	33	18	7	10	27	10	46	0	59	1	22	5 29	10 55
15	Wednes	5	56	6	16	19	0	11	7	11	26	1	45	2	3	5 36	11 42
16	Thurs..	6	33	6	48	19	9	11	44	11	59	2	23	2	42	5 42	0a28
17	Friday..	7	6	7	23	20	2	..	..	0	17	2	59	3	14	5 48	1 12
18	Satur..	7	39	7	56	20	4	0	34	0	51	3	31	3	47	5 53	1 55
19	Sunday	8	13	8	29	20	3	1	7	1	25	4	3	4	19	5 58	2 38
20	Mon ..	8	45	9	0	20	0	1	40	1	55	4	37	4	52	6 2	3 20
21	Tues ..	9	19	9	36	19	6	2	11	2	29	5	8	5	24	6 5	4 4
22	Wednes	9	53	10	13	18	7	2	46	3	5	5	42	6	1	6 8	4 49
23	Thurs..	10	33	10	54	17	6	3	27	3	49	6	21	6	43	6 10	5 37
24	Friday..	11	16	11	42	16	5	4	14	4	43	7	6	7	31	6 12	6 28
25	Satur..	..	..	0	12	15	8	5	17	5	54	8	0	8	33	6 13	7 23
26	Sunday	0	47	1	30	16	0	6	36	7	17	9	10	9	47	6 14	8 22
27	Mon ..	2	14	2	56	17	4	7	55	8	32	10	26	11	6	6 14	9 24
28	Tues ..	3	33	4	9	19	4	9	4	9	34	11	45	..	..	6 13	10 27
29	Wednes	4	42	5	14	21	6	10	2	10	28	0	18	0	49	6 12	11 28
30	Thurs..	5	43	6	10	22	5	10	54	11	20	1	18	1	46	6 10	morn
31	Friday..	6	36	7	0	23	6	11	47	..	..	2	11	2	36	6 7	0 27

The above are in Greenwich Mean Time, if local Time be required for
 Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter. 6th, 10h. 5m. a.m. | First Quarter. 22nd, 6h. 20m. a.m.
 New Moon .. 14th, 2h. 3m. p.m. | Full Moon .. 28th, 8h. 55m. p.m.

M. D.	WEEK DAYS.	Barnstaple.						Bridgwater.						Bristol.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	P.	I.	H.	M.	H.	M.	P.	I.	H.	M.	H.	M.	P.	I.
1	Saturday..	6	47	7	8	29	3	8	45	9	6	17	1	8	25	8	46	32	9
2	Sunday ..	7	30	7	52	28	11	9	27	9	47	16	8	9	7	9	27	32	2
3	Monday..	8	14	8	36	28	3	10	7	10	27	15	10	9	47	10	7	30	11
4	Tuesday..	8	53	9	12	7	0	10	42	10	59	14	3	10	22	10	39	28	8
5	Wednesdy	9	32	9	53	25	5	11	16	11	36	12	4	10	56	11	16	25	9
6	Thursday..	10	14	10	35	23	10	11	56	..	10	4	11	36	11	59	22	10	10
7	Friday ..	11	0	11	2	22	0	0	19	0	46	8	0	..	0	26	19	6	6
8	Saturday..	..	0	6	21	1	1	1	20	2	0	6	10	1	0	1	39	17	10
9	Sunday ..	0	45	1	32	21	2	2	40	3	20	6	11	2	20	3	0	18	1
10	Monday..	2	11	2	50	21	7	3	59	4	41	7	5	3	39	4	21	18	9
11	Tuesday..	3	21	3	49	23	4	5	14	5	44	9	8	4	54	5	24	21	11
12	Wednesdy	4	13	4	35	24	5	6	9	6	30	11	1	5	49	6	11	23	11
13	Thursday..	4	57	5	18	25	6	6	53	7	14	12	2	6	33	6	54	25	11
14	Friday ..	5	35	5	52	25	10	7	32	7	50	12	10	7	12	7	30	26	6
15	Saturday..	6	7	6	22	26	6	8	6	8	20	13	8	7	46	8	0	27	9
16	Sunday ..	6	39	6	52	26	10	8	37	8	51	14	1	8	17	8	31	28	4
17	Monday..	7	10	7	23	27	1	9	8	9	21	14	5	8	48	9	0	28	10
18	Tuesday..	7	42	7	58	26	9	9	39	9	53	14	0	9	19	9	33	28	2
19	Wednesdy	8	16	8	35	26	3	10	9	10	26	13	4	9	49	10	6	27	4
20	Thursday..	8	52	9	10	25	6	10	41	10	58	12	5	10	21	10	38	25	11
21	Friday ..	9	30	9	52	24	6	11	14	11	34	11	2	10	54	11	14	24	0
22	Saturday..	10	14	10	40	23	4	11	56	..	9	8	11	36	..	21	11	11	11
23	Sunday ..	11	12	11	51	22	6	0	24	1	0	8	8	0	4	0	41	20	6
24	Monday..	..	0	34	22	7	1	1	43	2	26	8	9	1	23	2	6	20	7
25	Tuesday..	1	22	2	6	23	8	3	11	3	53	10	1	2	51	3	33	22	6
26	Wednesdy	2	47	3	22	25	5	4	37	5	16	12	4	4	17	4	56	25	9
27	Thursday..	3	52	4	23	27	2	5	49	6	20	14	6	5	29	6	0	28	11
28	Friday ..	4	50	5	17	28	5	6	46	7	13	16	1	6	26	6	53	31	2
29	Saturday..	5	41	6	2	29	0	7	38	8	0	16	9	7	18	7	41	32	3
30	Sunday ..	6	25	6	47	29	5	8	23	8	45	17	4	8	3	8	25	33	0
31	Monday..	7	7	7	26	29	2	9	5	9	23	17	0	8	45	9	33	2	8

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter. 6th, 10h. 5m. a.m. | First Quarter. 22nd, 6h. 20m. a.m.
 New Moon .. 14th, 2h. 3m. p.m. | Full Moon .. 28th, 8h. 55m. p.m.

WEEK DAYS.	Cardiff.					Gloucester.					Ilfracombe.				
	Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
	H.	M.	H.	M.	F.	H.	M.	H.	M.	F.	H.	M.	H.	M.	F.
1 Saturday..	8	15	8	36	33	0	9	10	9	31	31	9	6	57	7
2 Sunday ..	8	57	9	17	32	6	9	52	10	12	31	1	7	40	8
3 Monday ..	9	37	9	57	31	5	10	32	10	52	29	9	8	24	8
4 Tuesday ..	10	12	10	29	29	6	11	7	11	24	27	5	9	3	9
5 Wednesday	10	46	11	6	27	0	11	41	12	0	24	3	9	42	10
6 Thursday.	11	26	11	49	24	6	..	0	21	21	1	1	10	24	10
7 Friday ..	..	0	16	21	8	0	44	1	11	17	7	11	10	11	39
8 Saturday..	0	50	1	29	20	3	1	45	2	24	15	10	..	0	16
9 Sunday ..	2	10	2	50	20	5	3	5	3	45	16	0	0	58	1
10 Monday ..	3	29	4	11	21	0	4	24	5	6	16	9	2	21	3
11 Tuesday ..	4	44	5	14	23	9	5	39	6	9	20	2	3	31	4
12 Wednesday	5	39	6	0	25	5	6	34	6	56	22	3	4	23	4
13 Thursday	6	23	6	44	27	2	7	18	7	39	24	5	5	7	5
14 Friday ..	7	2	7	20	27	8	7	57	8	15	25	1	5	45	6
15 Saturday..	7	36	7	50	28	9	8	31	8	45	26	5	6	17	6
16 Sunday ..	8	7	8	21	29	3	9	2	9	16	27	0	6	49	7
17 Monday ..	8	38	8	51	29	8	9	33	9	46	27	7	7	20	7
18 Tuesday ..	9	9	9	23	29	1	10	4	10	18	26	10	7	52	8
19 Wednesday	9	39	9	56	28	4	10	34	10	51	25	11	8	26	8
20 Thursday.	10	11	10	28	27	2	11	6	11	23	24	5	9	2	9
21 Friday ..	10	44	11	4	25	6	11	39	11	59	22	4	9	40	10
22 Saturday ..	11	26	11	54	23	9	..	0	21	20	2	10	10	24	10
23 Sunday ..	..	0	31	22	6	0	49	1	26	18	7	11	11	22	12
24 Monday ..	1	13	1	56	22	7	2	8	2	51	18	9	..	0	44
25 Tuesday ..	2	41	3	23	24	3	3	36	4	18	20	10	1	32	2
26 Wednesday	4	7	4	46	27	0	5	2	5	41	24	3	2	57	3
27 Thursday.	5	19	5	50	29	9	6	14	6	45	27	8	4	2	4
28 Friday ..	6	16	6	43	31	8	7	11	7	38	30	1	5	0	5
29 Saturday..	7	8	7	31	32	7	8	3	8	26	31	3	5	51	6
30 Sunday ..	7	53	8	15	33	3	8	48	9	10	32	1	6	35	6
31 Monday ..	8	35	8	53	32	11	9	30	9	48	31	8	7	17	7

The above are in Greenwich Mean Time, if local Time be required for
 Cardiff, *sub* 13m.—Gloucester, *sub*. 10m.—Ilfracombe, *sub*. 16m.

For further explanations, see page 3.

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PHASES OF THE MOON.

Last Quarter. 6th, 10h. 5m. a.m. | First Quarter. 22nd, 6h. 20m. a.m.
 New Moon .. 14th, 2h. 3m. p.m. | Full Moon .. 28th, 8h. 55m. p.m.

M. D.	WEEK DAYS.	Llanelly.						Newport.						Pembroke Dock.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Saturday..	7	32	7	53	23	8	8	25	8	46	33	0	7	32	7	53	22	9
2	Sunday ..	8	15	8	37	23	4	9	7	9	27	32	5	8	15	8	37	22	5
3	Monday..	8	59	9	21	22	7	9	47	10	7	31	2	8	59	9	21	21	9
4	Tuesday..	9	38	9	57	21	3	10	22	10	39	28	11	9	38	9	57	20	6
5	Wednesday	10	17	10	38	19	7	10	56	11	16	26	1	10	17	10	38	18	11
6	Thursday..	10	59	11	20	17	10	11	36	11	59	23	2	10	58	11	20	17	4
7	Friday ..	11	44	..	15	9	..	..	0	26	19	11	11	11	44	..	15	6	
8	Saturday..	0	14	0	51	14	9	1	0	1	39	18	3	0	14	0	51	14	7
9	Sunday ..	1	33	2	17	14	10	2	20	3	0	18	6	1	33	2	17	14	8
10	Monday..	2	56	3	35	15	3	3	39	4	21	19	2	2	56	3	35	15	1
11	Tuesday..	4	6	4	34	17	3	4	54	5	24	22	4	4	6	4	34	16	10
12	Wednesday	4	58	5	20	13	5	5	49	6	11	24	3	4	58	5	20	17	11
13	Thursday..	5	42	6	3	19	7	6	33	6	54	26	3	5	42	6	3	19	0
14	Friday ..	6	20	6	37	20	0	7	12	7	30	26	10	6	20	6	37	19	4
15	Saturday..	6	52	7	7	20	9	7	46	8	0	28	0	6	52	7	7	20	0
16	Sunday ..	7	24	7	38	21	1	8	17	8	31	28	7	7	24	7	38	20	4
17	Monday..	7	55	8	9	21	4	8	48	9	0	29	1	7	55	8	9	20	7
18	Tuesday..	8	27	8	43	21	0	9	19	9	33	28	5	8	27	8	43	20	3
19	Wednesday	9	1	9	20	20	5	9	49	10	6	27	7	9	1	9	20	19	9
20	Thursday..	9	37	9	55	19	7	10	21	10	38	26	3	9	37	9	55	19	0
21	Friday ..	10	15	10	37	18	6	10	54	11	14	24	4	10	15	10	37	18	0
22	Saturday..	10	59	11	25	17	3	11	36	..	22	4	10	59	11	25	16	10	
23	Sunday ..	11	57	..	16	4	0	0	4	0	41	20	11	11	57	..	16	0	
24	Monday..	0	36	1	19	16	5	1	23	2	6	21	0	0	36	1	19	16	1
25	Tuesday..	2	7	2	51	17	7	2	51	3	33	22	11	2	7	2	51	17	2
26	Wednesday	3	32	4	7	19	7	4	17	4	56	26	1	3	32	4	7	18	11
27	Thursday..	4	38	5	8	21	5	5	29	6	0	29	2	4	38	5	8	20	8
28	Friday ..	5	35	6	2	22	10	6	26	6	53	31	5	5	35	6	2	21	11
29	Saturday..	6	26	6	47	23	5	7	18	7	41	32	6	6	26	6	47	22	6
30	Sunday ..	7	10	7	32	23	11	8	3	8	25	33	3	7	10	7	32	22	11
31	Monday..	7	52	8	11	23	8	8	45	9	3	32	11	7	52	8	11	22	8

The above are in Greenwich Mean Time, if local Time be required for
 Llanelly, *sub.* 16m.—Newport, *sub.* 12m.—Pembroke Dock, *sub.* 20m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter.. 6th, 10h. 5m. a.m. | First Quarter. 22nd, 6h. 20m. a.m.
 New Moon .. 14th, 2h. 3m. p.m. | Full Moon .. 28th, 8h. 55m. p.m.

D. WEEK M. DAYS.	Swansea.						Liverpool.				London.				Equation of Time.	Moon's Transit.
	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.				
	H.	M.	H.	M.		H.	M.	H.	M.	H.	M.	H.	M.			
1 Satur...	7	22	7	43	24	1	0	11	0	33	3	2	3	25	6 4	1m22
2 Sunday	8	5	8	27	23	8	0	55	1	17	3	46	4	7	6 1	2 15
3 Mon ..	8	49	9	11	22	10	1	38	2	0	4	29	4	50	5 56	3 6
4 Tues ..	9	28	9	47	21	3	2	21	2	39	5	12	5	35	5 51	3 56
5 Wednes	10	7	10	28	19	4	3	0	3	20	5	53	6	14	5 46	4 45
6 Thurs	10	49	11	10	17	4	3	44	4	9	6	36	7	1	5 40	5 35
7 Friday..	11	34	..	..	15	0	4	35	5	7	7	26	7	52	5 33	6 24
8 Satur...	0	4	0	41	13	10	5	44	6	28	8	23	9	1	5 26	7 14
9 Sunday	1	23	2	7	13	11	7	11	7	49	9	40	10	20	5 18	8 3
10 Mon ..	2	46	3	25	14	5	8	24	8	58	11	0	11	36	5 10	8 52
11 Tues ..	3	56	4	24	16	8	9	24	9	47	..	0	11	5	5 1	9 39
12 Wednes	4	48	5	10	18	1	10	7	10	25	0	38	1	2	4 52	10 26
13 Thurs..	5	32	5	53	19	5	10	45	11	4	1	24	1	43	4 42	11 11
14 Friday..	6	10	6	27	19	10	11	20	11	38	2	2	2	20	4 31	11 54
15 Satur...	6	42	6	57	20	8	11	53	..	..	2	36	2	53	4 20	0a37
16 Sunday	7	14	7	28	21	1	0	8	0	25	3	8	3	22	4 9	1 20
17 Mon ..	7	45	8	0	21	5	0	39	0	57	3	38	3	52	3 57	2 3
18 Tues ..	8	17	8	33	21	0	1	11	1	29	4	9	4	23	3 44	2 48
19 Wednes	8	51	9	10	20	4	1	44	2	0	4	41	4	56	3 31	3 34
20 Thurs..	9	27	9	45	19	5	2	20	2	37	5	14	5	33	3 17	4 24
21 Friday..	10	5	10	27	18	2	2	57	3	18	5	51	6	12	3 3	5 16
22 Satur...	10	49	11	15	16	8	3	42	4	8	6	34	6	59	2 48	6 12
23 Sunday	11	47	..	..	15	8	4	41	5	24	7	25	7	58	2 33	7 10
24 Mon ..	0	26	1	9	15	9	6	11	6	57	8	40	9	25	2 18	8 10
25 Tues ..	1	57	2	41	17	1	7	41	8	19	10	7	10	51	2 1	9 11
26 Wednes	3	22	3	57	19	4	8	55	9	25	11	31	..	..	1 45	10 9
27 Thurs..	4	28	4	58	21	6	9	51	10	16	0	8	0	39	1 28	11 6
28 Friday..	5	25	5	52	23	1	10	38	11	3	1	6	1	33	1 11	morn.
29 Satur...	6	16	6	37	23	9	11	26	11	48	1	56	2	19	0 53	0 1
30 Sunday	7	0	7	22	24	4	..	0	11	..	2	42	3	3	0 35	0 53
31 Mon ..	7	42	8	0	24	0	0	33	0	54	3	25	3	46	0 17	1 44

The above are in Greenwich Mean Time, if local Time be required for
 Swansea, *sub.* 15m.—Liverpool, *sub.* 12m

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter.. 5th, 1h. 9m. a.m. | First Quarter. 20th, 1h. 3
 New Moon .. 13th, 4h. 42m. a.m. | Full Moon .. 27th, 6h.

M. D.	WEEK DAYS.	Barnstaple.					Bridgwater.					Bristol.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Tuesday..	7	46	8	6	28	1	9	41	10	0	15	8	9	21	9	4	10	1
2	Wednesday..	8	25	8	45	26	11	10	17	10	34	14	2	9	57	10	1	10	1
3	Thursday..	9	0	9	20	25	3	10	50	11	6	12	1	10	30	10	4	10	4
4	Friday ..	9	41	10	4	23	9	11	24	11	46	10	3	11	4	11	2	11	2
5	Saturday..	10	28	10	54	22	1	..	0	11	8	2	11	51	..	..	..	..	..
6	Sunday ..	11	26	..	..	21	0	0	41	1	16	6	8	0	21	0	5	0	5
7	Monday..	0	5	0	49	20	11	1	58	2	41	6	7	1	38	2	2	2	2
8	Tuesday..	1	34	2	15	21	7	3	23	4	3	7	5	3	3	3	4	3	4
9	Wednesday..	2	50	3	16	22	11	4	41	5	9	9	2	4	21	4	4	4	4
10	Thursday..	3	41	4	3	24	4	5	36	6	0	10	11	5	16	5	3	5	3
11	Friday ..	4	25	4	44	25	6	6	21	6	40	12	5	6	0	6	20	6	20
12	Saturday..	5	4	5	21	26	6	7	0	7	17	13	8	6	40	6	5	6	5
13	Sunday ..	5	37	5	51	26	11	7	34	7	49	14	2	7	14	7	29	7	29
14	Monday..	6	8	6	25	27	6	8	7	8	23	14	11	7	47	8	3	8	3
15	Tuesday..	6	43	6	58	27	8	8	41	8	56	15	1	8	21	8	36	8	36
16	Wednesday..	7	15	7	32	27	5	9	13	9	29	14	10	8	53	9	9	9	9
17	Thursday..	7	50	8	10	26	10	9	45	10	4	14	1	9	25	9	44	9	44
18	Friday ..	8	30	8	51	25	10	10	21	10	40	12	10	10	0	10	20	10	20
19	Saturday..	9	10	9	34	24	9	10	58	11	18	11	6	10	38	10	58	10	58
20	Sunday ..	10	0	10	29	23	7	11	40	..	10	0	11	20	11	51	..	..	..
21	Monday..	11	2	11	40	22	9	0	11	0	50	9	0	..	0	30	..	..	..
22	Tuesday..	..	..	0	23	22	9	1	30	2	16	9	0	1	11	1	56	1	56
23	Wednesday..	1	10	1	54	23	10	3	0	3	40	10	4	2	40	3	21	2	40
24	Thursday..	2	34	3	5	25	6	4	22	4	57	12	5	4	2	4	37	4	37
25	Friday ..	3	35	4	0	27	1	5	29	5	57	14	5	5	9	5	37	5	37
26	Saturday..	4	27	4	51	28	3	6	23	6	47	15	10	6	3	6	27	6	27
27	Sunday ..	5	17	5	38	28	8	7	13	7	35	16	4	6	53	7	15	7	15
28	Monday..	6	0	6	19	28	11	7	58	8	17	16	8	7	38	7	57	7	57
29	Tuesday..	6	40	7	0	28	8	8	38	8	57	16	4	8	18	8	37	8	37
30	Wednesday..	7	19	7	36	27	10	9	17	9	33	15	4	8	57	9	13	9	13

The above are in Greenwich Mean Time, if local Time be required
 Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 10

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter.. 5th, 1h. 9m. a.m. | First Quarter. 20th, 1h. 33m. p.m.
 New Moon .. 13th, 4h. 42m. a.m. | Full Moon .. 27th, 6h. 2m. a.m.

WEEK DAYS.	Cardiff							Gloucester.							Ilfracombe.						
	Morn.		Even.		Height			Morn.		Even.		Height			Morn.		Even.		Height		
	H.	M.	H.	M.	F.	I.		H.	M.	H.	M.	F.	I.		H.	M.	H.	M.	F.	I.	
1 Tuesday..	9	11	9	30	31	3		10	6	10	25	29	7		7	56	8	16	22	0	
2 Wednesday	9	47	10	4	29	5		10	42	10	59	27	3		8	35	8	55	20	8	
3 Thursday..	10	20	10	36	26	9		11	15	11	31	23	11		9	10	9	30	18	10	
4 Friday ..	10	54	11	16	24	5		11	49	..	..	21	0		9	51	10	14	17	3	
5 Saturday..	11	41	..	..	21	10		0	11	0	36	17	9		10	38	11	4	15	5	
6 Sunday ..	0	11	0	46	20	1		1	6	1	41	15	7		11	36	..	..	14	1	
7 Monday..	1	28	2	11	20	0		2	23	3	6	15	6		0	15	1	0	14	0	
8 Tuesday..	2	53	3	33	21	0		3	48	4	28	16	9		1	44	2	25	14	9	
9 Wednesday	4	11	4	39	23	2		5	6	5	34	19	5		3	0	3	26	16	3	
10 Thursday.	5	6	5	29	25	3		6	1	6	24	22	1		3	51	4	13	17	10	
11 Friday ..	5	51	6	10	27	2		6	46	7	5	24	5		4	35	4	54	19	1	
12 Saturday..	6	30	6	47	28	9		7	25	7	42	26	5		5	14	5	31	20	3	
13 Sunday ..	7	4	7	19	29	5		7	59	8	14	27	3		5	47	6	1	20	8	
14 Monday..	7	37	7	53	30	4		8	32	8	48	28	5		6	18	6	35	21	4	
15 Tuesday..	8	11	8	26	30	7		9	6	9	21	28	9		6	53	7	8	21	5	
16 Wednesday	8	43	8	59	30	2		9	38	9	54	28	2		7	25	7	42	21	3	
17 Thursday.	9	15	9	34	29	3		10	10	10	29	27	0		8	0	8	20	20	7	
18 Friday ..	9	51	10	10	27	8		10	46	11	5	25	1		8	40	9	1	19	6	
19 Saturday..	10	28	10	48	26	0		11	23	11	43	23	0		9	20	9	44	18	4	
20 Sunday ..	11	10	11	41	24	2		..	0	5	20	8			10	10	10	39	17	0	
21 Monday..	..	0	0	20	22	10		0	36	1	15	19	0		11	12	11	50	16	2	
22 Tuesday..	1	0	1	46	22	10		1	56	2	41	19	0		..	0	33	16	2		
23 Wednesday	2	30	3	10	24	6		3	25	4	6	21	1		1	20	2	4	17	4	
24 Thursday.	3	52	4	27	27	2		4	47	5	22	24	5		2	44	3	15	19	1	
25 Friday ..	4	59	5	27	29	8		5	54	6	22	27	7		3	44	4	10	20	10	
26 Saturday.	5	58	6	17	31	5		6	48	7	12	29	9		4	37	5	1	22	1	
27 Sunday ..	6	43	7	5	32	0		7	38	8	0	30	6		5	27	5	48	22	7	
28 Monday..	7	28	7	47	32	6		8	23	8	42	31	1		6	10	6	29	22	10	
29 Tuesday..	8	8	8	27	32	0		9	3	9	22	30	6		6	50	7	10	22	7	
30 Wednesday	8	47	9	3	30	10		9	42	9	58	29	0		7	29	7	46	21	8	

The above are in Greenwich Mean Time, if local Time be required for
 Cardiff, *sub.* 13m. —Glo'ster, *sub.* 10m.—Ilfracombe, *sub.* 16m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter.. 5th, 1h. 9m. a.m. | First Quarter. 20th, 1h. 33m.
 New Moon .. 13th, 4h. 42m. a.m. | Full Moon .. 27th, 6h. 2m.

M. D.	WEEK DAYS.	Llanelly.						Newport.						Pembroke D.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Tuesday..	8	31	8	51	22	6	9	21	9	40	30	11	8	31	8	51	22	6
2	Wednesdy	9	10	9	30	21	2	9	57	10	14	28	10	9	10	9	30	21	2
3	Thursday.	9	46	10	5	19	4	10	30	10	46	25	9	9	46	10	5	19	4
4	Friday ..	10	26	10	49	17	9	11	4	11	26	23	1	10	26	10	49	17	9
5	Saturday..	11	13	11	39	15	11	11	51	..	20	1	11	13	11	39	15	11	11
6	Sunday ..	..	0	11	14	7	0	21	0	56	18	1	..	0	11	14	7	0	21
7	Monday..	0	50	1	34	14	6	1	38	2	21	18	0	0	50	1	34	14	6
8	Tuesday..	2	19	3	0	15	3	3	3	3	43	19	2	2	19	3	0	15	3
9	Wednesdy	3	35	4	1	16	9	4	21	4	49	21	8	3	35	4	1	16	9
10	Thursday.	4	26	4	48	18	4	5	16	5	39	24	0	4	26	4	48	17	4
11	Friday ..	5	10	5	29	19	7	6	0	6	20	26	3	5	10	5	29	19	7
12	Saturday..	5	49	6	6	20	9	6	40	6	57	28	0	5	49	6	6	20	9
13	Sunday ..	6	22	6	36	21	2	7	14	7	29	28	10	6	22	6	36	20	2
14	Monday..	6	53	7	10	21	10	7	47	8	3	29	11	6	53	7	10	21	10
15	Tuesday..	7	28	7	43	21	11	8	21	8	36	30	2	7	28	7	43	21	11
16	Wednesday	8	0	8	17	21	9	8	53	9	9	29	8	8	0	8	17	20	9
17	Thursday.	8	35	8	55	21	1	9	25	9	44	28	7	8	35	8	55	20	1
18	Friday ..	9	15	9	36	20	0	10	0	10	20	26	10	9	15	9	36	19	0
19	Saturday..	9	55	10	19	18	10	10	38	10	58	24	11	9	55	10	19	18	10
20	Sunday ..	10	44	11	14	17	6	11	20	11	51	22	10	10	44	11	14	17	6
21	Monday..	11	47	..	16	8	..	..	0	30	21	3	11	47	..	16	8	..	0
22	Tuesday..	0	25	1	8	16	8	1	11	1	56	21	3	0	25	1	8	16	8
23	Wednesdy	1	55	2	39	17	10	2	40	3	21	23	2	1	55	2	39	17	10
24	Thursday.	3	19	3	50	19	7	4	2	4	37	26	3	3	19	3	50	19	7
25	Friday ..	4	20	4	46	21	4	5	9	5	37	29	1	4	20	4	46	20	4
26	Saturday .	5	12	5	36	22	7	6	3	6	27	31	2	5	12	5	36	21	7
27	Sunday ..	6	2	6	23	23	1	6	53	7	15	31	10	6	2	6	23	22	1
28	Monday..	6	44	7	4	23	4	7	38	7	57	32	5	6	44	7	4	22	4
29	Tuesday..	7	25	7	44	23	1	8	18	8	37	31	10	7	25	7	44	22	1
30	Wednesdy	8	4	8	21	22	2	8	57	9	13	30	6	8	4	8	21	21	2

The above are in Greenwich Mean Time, if local Time be required for
 Llanelly, *sub.* 16m.—Newport, *sub.* 12m.—Pembroke Dock, *sub.* 20m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter.. 5th, 1h. 9m. a.m. | First Quarter. 20th, 1h. 33m. p.m.
 New Moon .. 13th, 4h. 42m. a.m. | Full Moon .. 27th, 6h. 2m. a.m.

M. WEEK D. DAYS.	Swansea.						Liverpool.				London.				Equation of Time.	Moon's Tran- alt.
	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.				
	H.	M.	H.	M.		H.	M.	H.	M.	H.	M.	H.	M.			
1 Tues ..	8	21	8	41	22	8	1	13	1	32	4	6	4	25	0 2	2m35
2 Wednes	9	0	9	20	21	2	1	52	2	10	4	44	5	4	0 21	3 26
3 Thurs..	9	36	9	55	19	1	2	30	2	47	5	23	5	43	0 40	4 17
4 Friday..	10	16	10	39	17	3	3	7	3	31	6	2	6	23	0 59	5 7
5 Satur..	11	3	11	29	15	2	3	56	4	26	6	47	7	13	1 19	5 57
6 Sunday	12	0	..	..	13	8	5	0	5	40	7	43	8	17	1 39	6 47
7 Mon ..	0	40	1	24	13	7	6	27	7	12	8	57	9	39	1 59	7 35
8 Tues ..	2	9	2	50	14	5	7	51	8	27	10	21	11	2	2 19	8 22
9 Wednes	3	25	3	51	16	2	8	58	9	20	11	39	..	..	2 39	9 7
10 Thurs..	4	16	4	38	17	11	9	40	10	0	0	11	0	34	2 59	9 51
11 Friday..	5	0	5	19	19	5	10	17	10	33	0	55	1	15	3 21	10 35
12 Satur..	5	39	5	56	20	8	10	51	11	7	1	34	1	51	3 41	11 18
13 Sunday	6	12	6	26	21	2	11	22	11	36	2	8	2	23	4 2	0a 2
14 Mon ..	6	43	7	0	21	11	11	54	..	..	2	38	2	52	4 23	0 46
15 Tues ..	7	18	7	33	22	1	0	11	0	29	3	9	3	25	4 44	1 33
16 Wednes	7	50	8	7	21	10	0	44	1	2	3	42	3	57	5 5	2 21
17 Thurs..	8	25	8	45	21	1	1	19	1	36	4	14	4	31	5 26	3 13
18 Friday..	9	5	9	26	19	10	1	55	2	15	4	48	5	8	5 47	4 7
19 Satur..	9	45	10	9	18	6	2	36	2	57	5	28	5	50	6 8	5 4
20 Sunday	10	34	11	4	17	0	3	23	3	50	6	12	6	39	6 30	6 2
21 Mon ..	11	37	..	..	16	0	4	27	5	11	7	7	7	44	6 51	7 0
22 Tues ..	0	15	0	58	16	0	5	57	6	47	8	27	9	13	7 12	7 57
23 Wednes	1	45	2	29	17	4	7	31	8	8	9	57	10	40	7 33	8 53
24 Thurs..	3	9	3	40	19	5	8	43	9	10	11	20	11	56	7 53	9 47
25 Friday..	4	10	4	36	21	5	9	35	9	57	..	..	0	24	8 14	10 39
26 Satur..	5	2	5	26	22	10	10	19	10	39	0	50	1	13	8 34	11 31
27 Sunday	5	52	6	13	23	4	11	3	11	23	1	36	1	57	8 55	morn.
28 Mon ..	6	34	6	54	23	8	11	45	..	..	2	19	2	39	9 15	0 22
29 Tues ..	7	15	7	34	23	4	0	5	0	26	3	0	3	19	9 35	1 14
30 Wednes	7	54	8	11	22	4	0	45	1	6	3	39	3	58	9 55	2 5

The above are in Greenwich Time, if local Mean Time be required for
 Swansea, *sub.* 15 m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter.. 4th, 7h. 21m. p.m. | First Quarter. 19th, 8h. 6m. p.m.
 New Moon .. 12th, 6h. 42m. p.m. | Full Moon .. 26th, 5h. 55m. p.m.

M D.	WEEK DAYS.	Barnstaple.					Bridgwater.					Bristol.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday.	7	55	8	15	26	6	9	50	10	8	13	8	9	30	9	48	27	9
2	Friday ..	8	33	8	53	25	1	10	24	10	42	11	11	10	4	10	22	25	2
3	Saturday..	9	13	9	34	23	7	11	0	11	18	10	0	10	40	10	58	22	5
4	Sunday ..	9	58	10	23	22	6	11	40	..	8	8	11	20	11	45	20	6	
5	Monday..	10	51	11	23	21	1	0	5	0	38	6	10	..	0	18	17	10	
6	Tuesday..	12	0	..	..	20	10	1	14	1	53	6	6	0	54	1	33	17	5
7	Wednesday	0	42	1	25	21	6	2	34	3	14	7	4	2	14	2	54	18	7
8	Thursday.	2	3	2	36	22	3	3	50	4	25	8	4	3	30	4	5	20	0
9	Friday ..	3	0	3	22	24	1	4	52	5	16	10	8	4	32	4	56	23	4
10	Saturday..	3	42	4	3	25	4	5	37	5	59	12	2	5	17	5	39	25	8
11	Sunday ..	4	23	4	44	26	5	6	20	6	40	13	7	6	6	6	20	27	7
12	Monday..	5	3	5	23	27	3	6	59	7	19	14	7	6	39	6	59	29	2
13	Tuesday..	5	39	5	56	27	6	7	36	7	54	14	11	7	16	7	34	29	8
14	Wednesday	6	16	6	33	27	10	8	14	8	30	15	4	7	54	8	11	30	3
15	Thursday.	6	52	7	11	27	8	8	50	9	9	15	1	8	30	8	49	29	11
16	Friday ..	7	31	7	53	27	0	9	28	9	48	14	3	9	8	9	28	28	8
17	Saturday..	8	16	8	38	26	1	10	9	10	29	13	2	9	49	10	9	27	0
18	Sunday ..	9	0	9	27	25	0	10	50	11	12	11	9	10	30	10	52	25	1
19	Monday..	9	54	10	24	23	10	11	36	..	10	4	11	16	11	46	22	10	1
20	Tuesday..	10	55	11	31	23	1	0	6	0	42	9	5	..	0	22	21	7	4
21	Wednesday	..	..	0	11	23	0	1	21	2	5	9	3	1	0	1	45	21	4
22	Thursday.	0	54	1	36	23	9	2	45	3	25	10	3	2	25	3	5	22	9
23	Friday ..	2	10	2	40	25	2	3	58	4	30	12	0	3	38	4	10	25	3
24	Saturday..	3	8	3	37	26	6	5	0	5	32	13	8	4	41	5	12	27	9
25	Sunday ..	4	3	4	29	27	5	5	59	6	25	14	10	5	39	6	5	29	5
26	Monday..	4	52	5	17	27	10	6	49	7	13	15	4	6	29	6	53	30	1
27	Tuesday.	5	37	5	56	27	11	7	34	7	54	15	5	7	14	7	34	30	5
28	Wednesday	6	15	6	34	27	8	8	13	8	32	15	1	7	53	8	12	29	11
29	Thursday.	6	53	7	12	27	0	8	51	9	10	14	3	8	31	8	50	28	8
30	Friday ..	7	30	7	48	26	1	9	27	9	43	13	2	9	7	9	23	27	0
31	Saturday..	8	8	8	28	25	1	10	2	10	20	11	11	9	42	10	0	25	2

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m — Bridgwater, *sub.* 12m. — Bristol, *sub.* 10m.
 For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter. 4th, 7h. 21m. p.m.	First Quarter. 19th, 8h. 6m. p.m.
New Moon .. 12th, 6h. 42m. p.m.	Full Moon .. 26th, 5h. 55m. p.m.

New Moon .. 12th, 6h. 42m. p.m. Full Moon .. 26th, 5h. 55m. p.m.

N. D.	WEEK DAYS.	Cardiff.					Gloucester.					Ilfracombe.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday.	9	20	9	38	28	9	10	15	10	33	26	5	8	5	8	25	20	3
2	Friday ..	9	54	10	12	26	6	10	49	11	7	23	7	8	43	9	3	18	8
3	Saturday..	10	30	10	48	24	2	11	25	11	43	20	8	9	23	9	44	17	0
4	Sunday ..	11	10	11	35	22	6	..	0	5	18	7	10	8	10	33	15	10	10
5	Monday..	..	0	8	20	3	0	30	1	3	15	10	11	1	11	33	14	3	3
6	Tuesday..	0	44	1	23	19	10	1	39	2	18	15	3	..	0	10	13	11	11
7	Wednesday	2	4	2	44	20	10	2	59	3	39	16	6	0	52	1	35	14	8
8	Thursday.	3	20	3	55	22	1	4	15	4	50	18	1	2	13	2	46	15	7
9	Friday ..	4	22	4	46	24	11	5	17	5	41	21	7	3	10	3	32	17	7
10	Saturday..	5	7	5	29	26	11	6	2	6	24	24	2	3	52	4	13	18	11
11	Sunday ..	5	50	6	10	28	7	6	45	7	5	26	3	4	33	4	54	20	2
12	Monday..	6	29	6	49	29	11	7	24	7	44	27	11	5	13	5	33	21	0
13	Tuesday..	7	6	7	24	30	4	8	1	8	19	28	5	5	49	6	6	21	4
14	Wednesday	7	44	8	0	30	10	8	39	8	56	29	0	6	26	6	43	21	8
15	Thursday.	8	20	8	39	30	7	9	15	9	34	28	9	7	2	7	21	21	5
16	Friday ..	8	58	9	18	29	6	9	53	10	13	27	5	7	41	8	3	20	9
17	Saturday..	9	39	9	59	28	1	10	34	10	54	25	7	8	26	8	48	19	9
18	Sunday ..	10	20	10	42	26	5	11	15	11	37	23	6	9	10	9	37	18	6
19	Monday..	11	6	11	36	24	6	12	0	..	21	1	10	4	10	34	17	4	4
20	Tuesday..	..	0	12	23	5	0	31	1	7	19	9	11	5	11	41	16	6	6
21	Wednesday	0	51	1	35	23	3	1	46	2	30	19	7	..	0	21	16	4	4
22	Thursday.	2	15	2	55	24	5	3	10	3	50	21	0	1	4	1	46	17	3
23	Friday ..	3	28	4	0	26	7	4	23	4	55	23	9	2	20	2	50	18	9
24	Saturday.	4	31	5	2	28	9	5	26	5	57	26	5	3	18	3	47	20	3
25	Sunday ..	5	29	5	55	30	2	6	24	6	50	28	2	4	13	4	39	21	3
26	Monday..	6	19	6	43	30	9	7	14	7	38	28	11	5	2	5	27	21	8
27	Tuesday..	7	4	7	24	31	0	7	59	8	19	29	3	5	47	6	6	21	9
28	Wednesday	7	43	8	2	30	7	8	38	8	57	28	9	6	25	6	44	21	5
29	Thursday	8	21	8	40	29	6	9	16	9	35	27	5	7	3	7	22	20	9
30	Friday ..	8	57	9	13	28	1	9	52	10	8	25	7	7	40	7	58	19	9
31	Saturday..	9	32	9	50	26	6	10	27	10	45	23	7	8	18	8	38	18	8

The above are in Greenwich Mean Time, if local Time be required for
Cardiff, *sub.* 13m. —Glo'ster, *sub.* 10m.—Ilfracombe, *sub.* 16m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter.. 4th, 7h. 21m. p.m. | First Quarter. 19th, 8h. 6
 New Moon .. 12th, 6h. 42m. p.m. | Full Moon .. 26th, 5h. 55

M. D.	WEEK DAYS.	Llanelly.						Newport.						Pembroke			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.
1	Thursday.	8	40	9	0	20	9	9	30	9	48	28	0	8	40	9	0
2	Friday ..	9	18	9	38	19	2	10	4	10	22	25	6	9	18	9	38
3	Saturday..	9	58	10	19	17	6	10	40	10	58	22	10	9	58	10	19
4	Sunday ..	10	43	11	8	16	4	11	20	11	45	20	11	10	43	11	8
5	Monday..	11	36	..	..	14	9	..	..	0	18	18	3	11	36	..	..
6	Tuesday..	0	8	0	45	14	5	0	54	1	33	17	9	0	8	0	45
7	Wednesday	1	27	2	10	15	2	2	14	2	54	19	0	1	27	2	10
8	Thursday.	2	48	3	21	16	1	3	30	4	5	20	5	2	48	3	21
9	Friday ..	3	45	4	7	18	1	4	32	4	56	23	8	3	45	4	7
10	Saturday..	4	27	4	48	19	5	5	17	5	39	26	0	4	27	4	48
11	Sunday ..	5	8	5	29	20	8	6	0	6	20	27	10	5	8	5	29
12	Monday..	5	48	6	7	21	6	6	39	6	59	29	5	5	48	6	7
13	Tuesday..	6	24	6	41	21	10	7	16	7	34	29	11	6	24	6	41
14	Wednesday	7	1	7	18	22	2	7	54	8	11	30	6	7	1	7	18
15	Thursday.	7	37	7	56	21	11	8	80	8	49	30	2	7	37	7	56
16	Friday ..	8	16	8	38	21	3	9	8	9	28	28	11	8	16	8	38
17	Saturday..	9	1	9	23	20	3	9	49	10	9	27	4	9	1	9	23
18	Sunday ..	9	46	10	12	19	0	10	30	10	52	25	5	9	46	10	12
19	Monday..	10	39	11	9	17	10	11	16	11	46	23	2	10	39	11	9
20	Tuesday..	11	40	..	..	17	0	..	..	0	22	22	0	11	40	..	16
21	Wednesday	0	16	0	56	16	10	1	0	1	45	21	9	0	16	0	56
22	Thursday.	1	39	2	21	17	9	2	25	3	5	23	1	1	39	2	21
23	Friday ..	2	55	3	25	19	3	3	38	4	10	25	7	2	55	3	25
24	Saturday..	3	53	4	22	20	9	4	41	5	12	28	0	3	53	4	22
25	Sunday ..	4	48	5	14	21	9	5	39	6	5	29	8	4	48	5	14
26	Monday..	5	37	6	2	22	2	6	29	6	53	30	4	5	37	6	2
27	Tuesday..	6	22	6	41	22	3	7	14	7	34	30	8	6	22	6	41
28	Wednesday	7	0	7	19	21	11	7	53	8	12	30	2	7	0	7	19
29	Thursday.	7	38	7	57	21	3	8	81	8	50	28	11	7	38	7	57
30	Friday ..	8	15	8	33	20	3	9	7	9	23	27	4	8	15	8	33
31	Saturday..	8	53	9	13	19	2	9	42	10	0	25	6	8	53	9	13

The above are in Greenwich Mean Time, if local Time be required for
 Llanelly, *sub.* 16m.—Newport, *sub.* 12m.—Pembroke Dock, *sub.* 20m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter.. 4th, 7h. 21m. p.m. | First Quarter. 19th, 8h. 6m. p.m.
 New Moon .. 12th, 6h. 42m. p.m. | Full Moon .. 26th, 5h. 55m. p.m.

WEEK D. DAYS.	Swansea.						Liverpool.				London.				Equation of Time.	Moon's Trans- sit.	
	Morn.		Even.		Height		Morn.		Even.		Morn.		Even.				
	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.	H.	M.			M.	s.
1 Thurs..	8	30	8	50	20	8	1	23	1	41	4	18	4	35	10	14	2m57
2 Friday..	9	8	9	28	18	11	2	0	2	18	4	53	5	13	10	33	3 48
3 Satur...	9	48	10	9	17	0	2	39	3	0	5	31	5	53	10	52	4 39
4 Sunday	10	33	10	58	15	8	3	23	3	49	6	15	6	39	11	10	5 28
5 Mon ..	11	26	11	58	13	10	4	20	4	57	7	6	7	37	11	28	6 16
6 Tues ..	..	0	35	13	6		5	37	6	21	8	13	8	54	11	46	7 2
7 Wednes	1	17	2	0	14	4	7	4	7	44	9	34	10	14	12	3	7 46
8 Thurs..	2	38	3	11	15	4	8	16	8	45	10	54	11	28	12	20	8 30
9 Friday..	3	35	3	57	17	8	9	6	9	25	11	58	..	..	12	36	9 13
10 Satur...	4	17	4	38	19	2	9	41	10	0	0	20	0	39	12	52	9 57
11 Sunday	4	58	5	19	20	7	10	16	10	33	0	56	1	15	13	8	10 41
12 Mon ..	5	38	5	57	21	7	10	50	11	8	1	33	1	51	13	23	11 27
13 Tues ..	6	14	6	31	21	11	11	24	11	42	2	7	2	24	13	37	0a16
14 Wednes	6	51	7	8	22	4	..	0	2		2	40	2	57	13	51	1 8
15 Thurs..	7	27	7	46	22	1	0	19	0	38	3	16	3	33	14	5	2 3
16 Friday..	8	6	8	28	21	3	0	58	1	18	3	51	4	10	14	18	2 59
17 Satur...	8	51	9	13	20	2	1	39	2	0	4	30	4	51	14	30	3 57
18 Sunday	9	36	10	2	18	9	2	23	2	47	5	14	5	36	14	42	4 55
19 Mon ..	10	29	11	0	17	4	3	15	3	45	6	2	6	31	14	53	5 52
20 Tues ..	11	30	..	16	5		4	21	5	2	7	2	7	38	15	3	6 47
21 Wednes	0	6	0	46	16	3	5	46	6	35	8	18	9	3	15	13	7 40
22 Thurs..	1	29	2	11	17	3	7	16	7	53	9	46	10	25	15	23	8 31
23 Friday..	2	45	3	15	19	0	8	32	8	49	11	4	11	35	15	31	9 21
24 Satur...	3	43	4	12	20	8	9	13	9	37	..	0	2	16	39	10	12
25 Sunday	4	38	5	4	21	10	10	0	10	21	0	27	0	52	15	47	11 2
26 Mon ..	5	27	5	52	22	4	10	40	11	3	1	15	1	38	15	53	11 53
27 Tues ..	6	12	6	31	22	5	11	22	11	42	1	58	2	19	15	59	morn.
28 Wednes	6	50	7	9	22	1	12	0	..		2	38	2	57	16	4	0 45
29 Thurs..	7	28	7	47	21	3	0	20	0	40	3	15	3	34	16	8	1 37
30 Friday..	8	5	8	23	20	2	1	0	1	17	3	52	4	11	16	12	2 29
31 Satur...	8	43	9	3	18	11	1	34	1	53	4	29	4	46	16	15	3 19

Add to Mean Time.—Subtract from Apparent Time.

The above are in Greenwich Mean Time, if local Time be required for
 Swansea, sub. 16m.—Liverpool, sub. 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter. 3rd, 3h. 34m. p.m. | First Quarter. 18th, 3h.
 New Moon .. 11th, 7h. 59m. a.m. | Full Moon .. 25th, 9h.

M. D.	WEEK DAYS.	Barnstaple.					Bridgwater.					Bris				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Eve		
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.
1	Sunday ..	8	47	9	8	23	10	10	37	10	55	10	4	10	17	10
2	Monday..	9	27	9	49	22	10	11	12	11	32	9	1	10	52	11
3	Tuesday..	10	15	10	42	21	9	11	57	..	7	8	11	37	..	..
4	Wednesday	11	12	11	43	21	3	0	27	1	0	7	0	0	7	0
5	Thursday.	..	..	0	17	21	7	1	34	2	11	7	5	1	14	1
6	Friday ..	0	55	1	30	22	3	2	46	3	18	8	4	2	26	2
7	Saturday..	2	0	2	30	23	6	3	49	4	19	9	11	3	29	3
8	Sunday ..	2	57	3	20	24	10	4	48	5	13	11	7	4	28	4
9	Monday..	3	44	4	6	26	0	5	39	6	1	13	0	5	19	5
10	Tuesday..	4	27	4	50	26	11	6	23	6	46	14	2	6	3	6
11	Wednesday	5	15	5	34	27	7	7	10	7	30	15	0	6	50	7
12	Thursday.	5	53	6	15	27	8	7	51	8	13	15	1	7	31	7
13	Friday ..	6	34	6	57	27	8	8	32	8	55	15	1	8	12	8
14	Saturday..	7	19	7	42	27	3	9	17	9	39	14	7	8	57	9
15	Sunday ..	8	6	8	31	26	8	10	0	10	22	13	10	9	40	10
16	Monday..	8	56	9	22	25	9	10	45	11	7	12	9	10	25	10
17	Tuesday..	9	48	10	15	24	11	11	30	11	57	11	8	11	10	11
18	Wednesday	10	33	11	12	23	11	..	0	28	10	5	..	..	0	8
19	Thursday.	11	34	..	..	23	3	1	0	1	35	9	7	0	41	1
20	Friday ..	0	20	1	0	23	6	2	14	2	51	9	11	1	54	2
21	Saturday..	1	40	2	13	24	4	3	28	4	0	10	11	3	8	3
22	Sunday ..	2	44	3	12	25	4	4	33	5	4	12	2	4	13	4
23	Monday..	3	42	4	8	26	0	5	37	6	3	13	0	5	17	5
24	Tuesday..	4	33	4	57	26	6	6	30	6	53	13	8	6	10	6
25	Wednesday	5	20	5	40	26	7	7	16	7	37	13	9	6	56	7
26	Thursday.	6	0	6	17	26	7	7	58	8	15	13	9	7	38	7
27	Friday ..	6	45	6	53	26	4	8	33	8	51	13	5	8	13	8
28	Saturday..	7	12	7	29	26	0	9	10	9	26	13	0	8	50	9
29	Sunday ..	7	48	8	6	25	5	9	43	10	0	12	4	9	23	9
30	Monday..	8	26	8	45	24	8	10	18	10	34	11	4	10	0	10

The above are in Greenwich Mean Time, if local Time be required
 Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 10

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter.. 3rd, 3h. 34m. p.m. | First Quarter. 18th, 3h. 5m. p.m.
 New Moon .. 11th, 7h. 59m. a.m. | Full Moon .. 25th, 9h. 1m. a.m.

WEEK DAYS.	Cardiff.					Gloucester.					Ilfracombe.				
	Morn.	Even.	Height			Morn.	Even.	Height			Morn.	Even.	Height		
	H. M.	H. M.	F.	I.		H. M.	H. M.	F.	I.		H. M.	H. M.	F.	I.	
1 Sunday ..	10 7	10 25	24	6	11 2	11 20	21	1		8 57	9 18	17	4		
2 Monday ..	10 42	11 2	23	0	11 27	11 57	19	3		9 37	9 59	16	2		
3 Tuesday ..	11 27	11 57	21	3	..	0 22	17	1		10 25	10 52	15	0		
4 Wednesday ..	..	0 30	20	6	0 52	1 25	16	1		11 22	11 53	14	5		
5 Thursday ..	1 4	1 41	21	0	1 59	2 36	16	9		..	0 27	14	9		
6 Friday ..	2 16	2 48	22	1	3 11	3 43	18	1		1 5	1 40	15	7		
7 Saturday ..	3 19	3 49	24	0	4 14	4 44	20	6		2 10	2 40	16	11		
8 Sunday ..	4 18	4 43	26	1	5 13	5 38	23	1		3 7	3 30	18	5		
9 Monday ..	5 9	5 31	28	0	6 4	6 26	25	6		3 54	4 16	19	8		
10 Tuesday ..	5 53	6 16	29	5	6 48	7 11	27	3		4 37	5 0	20	8		
11 Wednesday ..	6 40	7 0	30	6	7 35	7 55	28	7		5 25	5 44	21	5		
12 Thursday ..	7 21	7 43	30	7	8 16	8 38	28	9		6 3	6 25	21	5		
13 Friday ..	8 2	8 25	30	7	8 57	9 20	28	9		6 44	7 7	21	5		
14 Saturday ..	8 47	9 9	29	11	9 42	10 4	27	11		7 29	7 52	21	0		
15 Sunday ..	9 30	9 52	29	0	10 25	10 47	26	9		8 16	8 41	20	4		
16 Monday ..	10 15	10 37	27	6	11 10	11 32	24	10		9 6	9 32	19	5		
17 Tuesday ..	11 0	11 27	26	3	11 56	..	23	4		9 58	10 25	18	6		
18 Wednesday ..	11 58	..	24	8	0 22	0 53	21	4		10 43	11 22	17	4		
19 Thursday ..	0 31	1 5	23	8	1 26	2 0	20	1		11 44	..	16	8		
20 Friday ..	1 44	2 21	24	0	2 39	3 16	20	6		0 30	1 10	16	11		
21 Saturday ..	2 58	3 30	25	3	3 53	4 25	22	1		1 50	2 23	17	10		
22 Sunday ..	4 3	4 34	26	11	4 58	5 29	24	2		2 54	3 22	18	11		
23 Monday ..	5 7	5 33	28	0	6 2	6 28	25	6		3 52	4 18	19	8		
24 Tuesday ..	6 0	6 23	28	9	6 54	7 18	26	5		4 43	5 7	20	2		
25 Wednesday ..	6 46	7 7	28	11	7 41	8 2	26	8		5 30	5 50	20	3		
26 Thursday ..	7 28	7 45	28	11	8 23	8 40	26	8		6 10	6 27	20	3		
27 Friday ..	8 3	8 21	28	6	8 58	9 16	26	1		6 55	7 3	20	0		
28 Saturday ..	8 40	8 56	28	0	9 35	9 51	25	6		7 22	7 39	19	8		
29 Sunday ..	9 13	9 30	27	0	10 8	10 25	24	3		7 58	8 16	19	1		
30 Monday ..	9 48	10 4	25	10	10 43	10 59	22	9		8 36	8 55	18	2		

The above are in Greenwich Mean Time, if local Time be required for
 Cardiff, *sub* 13m.—Gloucester, *sub* 10m.—Ilfracombe, *sub* 16m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter.. 3rd, 3h. 34m. p.m. | First Quarter. 18th, 3h. 5m. p.m.
 New Moon .. 11th, 7h. 59m. a.m. | Full Moon .. 25th, 9h. 1m. a.m.

M. D.	WEEK DAYS.	Llanelly.						Newport.						Pembroke Dock.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	H. M.	H. M.	F. I.	F. I.
1	Sunday ..	9 32	9 53	17 10	10 17	10 35	23 2	9 32	9 53	17 10	10 17	10 35	23 2	9 32	9 53	17 10	10 17	10 35	23 2
2	Monday ..	10 12	10 34	16 8	10 52	11 12	21 6	10 12	10 34	16 8	10 52	11 12	21 6	10 12	10 34	16 8	10 52	11 12	21 6
3	Tuesday ..	11 0	11 27	15 6	11 37	..	19 5	11 0	11 27	15 6	11 37	..	19 5	11 0	11 27	15 6	11 37	..	19 5
4	Wednesday	11 57	..	14 11	0 7	0 40	18 7	11 57	..	14 9	0 7	0 40	18 7	11 57	..	14 9	0 7	0 40	18 7
5	Thursday ..	0 28	1 2	15 3	1 14	1 51	19 2	0 28	1 2	15 3	1 14	1 51	19 2	0 28	1 2	15 3	1 14	1 51	19 2
6	Friday ..	1 40	2 15	16 1	2 26	2 58	20 5	1 40	2 15	16 1	2 26	2 58	20 5	1 40	2 15	16 1	2 26	2 58	20 5
7	Saturday ..	2 46	3 15	17 5	3 29	3 59	22 8	2 46	3 15	17 0	3 29	3 59	22 8	2 46	3 15	17 0	3 29	3 59	22 8
8	Sunday ..	3 42	4 5	18 11	4 28	4 53	25 0	3 42	4 5	18 4	4 28	4 53	25 0	3 42	4 5	18 4	4 28	4 53	25 0
9	Monday ..	4 29	4 51	20 2	5 19	5 41	27 3	4 29	4 51	19 6	5 19	5 41	27 3	4 29	4 51	19 6	5 19	5 41	27 3
10	Tuesday ..	5 12	5 35	21 2	6 3	6 26	28 10	5 12	5 35	20 5	6 3	6 26	28 10	5 12	5 35	20 5	6 3	6 26	28 10
11	Wednesday	6 0	6 19	21 11	6 50	7 10	30 1	6 0	6 19	21 1	6 50	7 10	30 1	6 0	6 19	21 1	6 50	7 10	30 1
12	Thursday ..	6 38	7 0	21 11	7 31	7 53	30 2	6 38	7 0	21 2	7 31	7 53	30 2	6 38	7 0	21 2	7 31	7 53	30 2
13	Friday ..	7 19	7 42	21 11	8 12	8 35	30 2	7 19	7 42	21 2	8 12	8 35	30 2	7 19	7 42	21 2	8 12	8 35	30 2
14	Saturday ..	8 4	8 27	21 6	8 57	9 19	29 5	8 4	8 27	20 9	8 57	9 19	29 5	8 4	8 27	20 9	8 57	9 19	29 5
15	Sunday ..	8 51	9 16	20 10	9 40	10 2	28 4	8 51	9 16	20 2	9 40	10 2	28 4	8 51	9 16	20 2	9 40	10 2	28 4
16	Monday ..	9 41	10 7	19 11	10 25	10 47	28 9	9 41	10 7	19 3	10 25	10 47	28 9	9 41	10 7	19 3	10 25	10 47	28 9
17	Tuesday ..	10 33	11 0	19 0	11 10	11 37	25 2	10 33	11 0	18 5	11 10	11 37	25 2	10 33	11 0	18 5	11 10	11 37	25 2
18	Wednesday	11 28	11 57	17 10	..	0 8	23 4	11 28	11 57	17 5	..	0 8	23 4	11 28	11 57	17 5	..	0 8	23 4
19	Thursday ..	..	0 29	17 2	0 41	1 15	22 3	..	0 29	16 9	0 41	1 15	22 3	..	0 29	16 9	0 41	1 15	22 3
20	Friday ..	1 5	1 45	17 5	1 54	2 31	22 8	1 5	1 45	17 0	1 54	2 31	22 8	1 5	1 45	17 0	1 54	2 31	22 8
21	Saturday ..	2 25	2 58	18 4	3 8	3 40	24 0	2 25	2 58	17 10	3 8	3 40	24 0	2 25	2 58	17 10	3 8	3 40	24 0
22	Sunday ..	3 29	3 57	19 5	4 13	4 44	26 0	3 29	3 57	18 10	4 13	4 44	26 0	3 29	3 57	18 10	4 13	4 44	26 0
23	Monday ..	4 27	4 53	20 2	5 17	5 43	27 3	4 27	4 53	19 6	5 17	5 43	27 3	4 27	4 53	19 6	5 17	5 43	27 3
24	Tuesday ..	5 18	5 42	20 8	6 10	6 33	28 0	5 18	5 42	20 0	6 10	6 33	28 0	5 18	5 42	20 0	6 10	6 33	28 0
25	Wednesday	6 5	6 25	20 9	6 56	7 17	28 3	6 5	6 25	20 1	6 56	7 17	28 3	6 5	6 25	20 1	6 56	7 17	28 3
26	Thursday ..	6 44	7 2	20 9	7 38	7 55	28 3	6 44	7 2	20 1	7 38	7 55	28 3	6 44	7 2	20 1	7 38	7 55	28 3
27	Friday ..	7 40	7 38	20 6	8 13	8 31	27 9	7 40	7 38	19 10	8 13	8 31	27 9	7 40	7 38	19 10	8 13	8 31	27 9
28	Saturday ..	7 57	8 14	20 2	8 50	9 6	27 3	7 57	8 14	19 6	8 50	9 6	27 3	7 57	8 14	19 6	8 50	9 6	27 3
29	Sunday ..	8 33	8 51	19 7	9 23	9 40	26 1	8 33	8 51	18 11	9 23	9 40	26 1	8 33	8 51	18 11	9 23	9 40	26 1
30	Monday ..	9 11	9 30	18 8	10 0	10 14	24 9	9 11	9 30	18 2	10 0	10 14	24 9	9 11	9 30	18 2	10 0	10 14	24 9

The above are in Greenwich Mean Time, if local Time be required for
 Llanelly, *sub.* 16m.—Newport, *sub.* 12m.—Pembroke Dock, *sub.* 20m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter.. 3rd, 3h. 34m. p.m. | First Quarter. 18th, 3h. 5m. p.m.
 New Moon .. 11th, 7h. 59m. a.m. | Full Moon .. 25th, 9h. 1m. a.m.

D. WEEK M. DAYS.	Swansea.						Liverpool.				London.				Equation of Time.	Moon's Tran- sit.	
	Morn.		Even.		Height		Morn.		Even.		Morn.		Even.				
	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.	H.	M.			
1 Sunday	9	22	9	43	17	4	2	13	2	33	5	6	5	26	16	17	4 m8
2 Mon ..	10	2	10	24	16	1	2	54	3	15	5	46	6	9	16	18	4 55
3 Tues ..	10	50	11	17	14	8	3	39	4	10	6	31	6	56	16	18	5 40
4 Wednes	11	47	..	..	14	0	4	44	5	23	7	27	8	1	16	18	6 24
5 Thurs	0	18	0	52	14	5	6	0	6	42	8	39	9	16	16	16	7 6
6 Friday	1	30	2	5	15	4	7	17	7	48	9	52	10	26	16	14	7 49
7 Satur..	2	36	3	5	16	11	8	15	8	40	10	58	11	27	16	11	8 33
8 Sunday	3	32	3	55	18	7	9	3	9	23	11	53	..	..	16	7	9 18
9 Mon ..	4	19	4	41	20	0	9	43	10	0	0	17	0	37	16	3	10 6
10 Tues ..	5	2	5	25	21	2	10	19	10	38	0	58	1	17	15	57	10 57
11 Wednes	5	49	6	9	22	0	11	0	11	19	1	36	1	56	15	51	11 52
12 Thurs..	6	28	6	50	22	1	11	39	12	0	2	16	2	35	15	43	0a49
13 Friday	7	9	7	32	22	1	..	..	0	20	2	54	3	15	15	35	1 49
14 Satur..	7	54	8	17	21	7	0	43	1	6	3	34	3	56	15	26	2 49
15 Sunday	8	41	9	6	20	10	1	29	1	52	4	18	4	41	15	16	3 47
16 Mon ..	9	31	9	57	19	9	2	16	2	42	5	4	5	29	15	6	4 43
17 Tues ..	10	23	10	49	18	8	3	9	3	38	5	56	6	25	14	54	5 37
18 Wednes	11	18	11	47	17	5	4	10	4	46	6	55	7	27	14	42	6 28
19 Thurs..	..	..	0	19	16	7	5	24	6	2	8	2	8	40	14	29	7 18
20 Friday	0	55	1	35	16	11	6	45	7	22	9	17	9	55	14	15	8 7
21 Satur..	2	15	2	48	17	11	7	56	8	25	10	31	11	7	14	0	8 56
22 Sunday	3	19	3	47	19	2	8	52	9	16	11	37	..	..	13	45	9 45
23 Mon ..	4	17	4	43	20	0	9	41	10	3	0	5	0	30	13	29	10 36
24 Tues ..	5	8	5	32	20	8	10	24	10	45	0	56	1	19	13	12	11 28
25 Wednes	5	55	6	15	20	9	11	6	11	25	1	41	2	2	12	54	morn.
26 Thurs..	6	34	6	52	20	9	11	45	..	..	2	22	2	41	12	35	0 19
27 Friday	7	10	7	28	20	5	0	3	0	21	3	0	3	17	12	16	1 10
28 Satur..	7	47	8	4	20	0	0	39	1	0	3	35	3	52	11	56	2 0
29 Sunday	8	23	8	41	19	4	1	16	1	34	4	11	4	28	11	35	2 48
30 Mon ..	9	0	9	20	18	4	1	52	2	11	4	46	5	4	11	14	3 34

Add to Mean Time.—
 Subtract from Apparent Time.

The above are in Greenwich Time, if local Mean Time be required for
 Swansea, *sub.* 15 m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter.. 3rd, 0h. 14m. p.m. | First Quarter. 17th, 11h. 46m. a.m.
 New Moon .. 10th, 8h. 23m. p.m. | Full Moon .. 25th, 2h. 50m. a.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgwater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Tuesday..	9 2	9 21	23 10	10 50	11 7	10 4	10 30	10 47	22 10			
2	Wednesday	9 40	10 1	23 0	11 24	11 43	9 3	11 4	11 23	21 4			
3	Thursday..	10 23	10 47	22 3	..	0 5	8 4	11 45	..	20 0			
4	Friday ..	11 15	11 44	21 10	0 33	1 5	7 10	0 13	0 45	19 3			
5	Saturday..	..	0 16	22 0	1 35	2 10	8 0	1 15	1 50	19 6			
6	Sunday ..	0 50	1 25	22 8	2 42	3 14	8 10	2 22	2 54	20 9			
7	Monday..	2 0	2 30	23 9	3 46	4 19	10 3	3 26	3 59	22 9			
8	Tuesday..	3 0	3 27	25 1	4 52	5 21	11 11	4 32	5 0	25 2			
9	Wednesday	3 52	4 20	26 5	5 47	6 16	13 7	5 27	5 56	27 7			
10	Thursday..	4 49	5 14	27 5	6 45	7 10	14 10	6 25	6 50	29 5			
11	Friday ..	5 38	6 0	27 8	7 35	8 0	15 1	7 15	7 40	29 11			
12	Saturday..	6 26	6 50	28 0	8 24	8 48	15 6	8 4	8 28	30 6			
13	Sunday ..	7 13	7 36	27 11	9 11	9 33	15 5	8 51	9 13	30 5			
14	Monday..	8 0	8 25	27 8	9 55	10 17	15 1	9 35	9 57	29 11			
15	Tuesday..	8 50	9 15	26 11	10 39	11 1	14 2	10 19	10 41	28 7			
16	Wednesday	9 47	10 0	25 10	11 20	11 40	12 10	11 0	11 20	26 6			
17	Thursday..	10 23	10 47	24 8	..	0 5	11 4	11 45	..	24 5			
18	Friday ..	11 14	11 44	23 6	0 32	1 3	9 11	0 12	0 43	22 3			
19	Saturday..	..	0 17	22 11	1 35	2 11	9 2	1 15	1 51	21 3			
20	Sunday ..	0 57	1 37	23 0	2 48	3 26	9 3	2 28	3 6	21 4			
21	Monday..	2 15	2 46	23 7	4 3	4 36	10 0	3 43	4 16	22 5			
22	Tuesday..	3 17	3 42	24 6	5 11	5 39	11 2	4 51	5 19	24 0			
23	Wednesday	4 12	4 39	25 3	6 8	6 35	12 1	5 48	6 15	25 5			
24	Thursday..	5 3	5 25	25 8	6 59	7 22	12 7	6 39	7 2	26 3			
25	Friday ..	5 45	6 5	25 10	7 42	8 4	12 10	7 22	7 44	26 6			
26	Saturday..	6 22	6 39	26 0	8 20	8 37	13 0	8 0	8 17	26 11			
27	Sunday ..	6 57	7 13	25 11	8 55	9 11	12 11	8 35	8 51	26 9			
28	Monday..	7 31	7 50	25 9	9 28	9 45	12 9	9 8	9 25	26 4			
29	Tuesday..	8 5	8 22	25 6	9 59	10 15	12 5	9 39	9 55	25 11			
30	Wednesday	8 41	8 56	25 1	10 30	10 45	11 11	10 11	10 25	25 2			
31	Thursday..	9 27	9 46	24 4	11 0	11 18	10 11	10 41	10 58	23 8			

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter. 3rd, 0h. 14m. p.m. | First Quarter. 17th, 11h. 46m. a.m.
 New Moon .. 10th, 8h. 23m. p.m. | Full Moon .. 25th, 2h. 50m. a.m.

WEEK DAYS.	Cardiff.					Gloucester.					Ilfracombe.							
	Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1 Tuesday..	10	20	10	37	24	6	11	15	11	32	21	1	9	12	9	31	17	4
2 Wednesday	10	54	11	13	23	3	11	49	..	19	7	9	50	10	11	16	4	7
3 Thursday..	11	35	..	22	1	0	8	0	30	18	1	10	33	10	57	15	7	4
4 Friday ..	0	3	0	35	21	5	0	58	1	30	17	3	11	25	11	54	15	1
5 Saturday..	1	5	1	40	21	8	2	0	2	35	17	7	..	0	26	15	3	3
6 Sunday ..	2	12	2	44	22	9	3	7	3	39	18	11	1	0	1	35	16	0
7 Monday ..	3	16	3	49	24	5	4	11	4	44	21	0	2	10	2	40	17	3
8 Tuesday..	4	22	4	51	26	6	5	17	5	46	23	7	3	10	3	37	18	8
9 Wednesday	5	17	5	46	28	7	6	12	6	41	26	3	4	2	4	30	20	2
10 Thursday.	6	15	6	40	30	2	7	10	7	35	28	2	5	0	5	24	21	3
11 Friday ..	7	5	7	30	30	7	8	0	8	25	28	9	5	48	6	10	21	5
12 Saturday..	7	54	8	18	31	1	8	49	9	13	29	4	6	36	7	0	21	10
13 Sunday ..	8	41	9	33	1	0	9	36	9	58	29	3	7	23	7	46	21	9
14 Monday ..	9	25	9	47	30	7	10	20	10	42	28	9	8	10	8	35	21	5
15 Tuesday..	10	9	10	31	29	5	11	5	11	26	27	3	9	0	9	25	20	8
16 Wednesday	10	50	11	10	27	8	11	45	..	25	1	9	47	10	10	19	6	2
17 Thursday.	11	35	..	25	10	0	0	5	0	30	22	9	10	33	10	57	18	2
18 Friday ..	0	2	0	33	24	0	0	57	1	28	20	6	11	24	11	54	16	11
19 Saturday..	1	5	1	41	23	2	2	0	2	36	19	5	..	0	27	16	3	3
20 Sunday ..	2	18	2	56	23	3	3	13	3	51	19	7	1	7	1	47	16	4
21 Monday ..	3	33	4	6	24	2	4	28	5	1	20	8	2	25	2	56	17	0
22 Tuesday..	4	41	5	9	25	6	5	36	6	4	22	4	3	37	3	52	18	0
23 Wednesday	5	38	6	5	26	9	6	33	7	0	23	11	4	22	4	49	18	10
24 Thursday.	6	29	6	52	27	5	7	24	7	47	24	9	5	13	5	35	19	3
25 Friday ..	7	12	7	34	27	8	8	7	8	29	25	1	5	55	6	15	19	6
26 Saturday..	7	50	8	7	28	0	8	45	9	2	25	6	6	32	6	49	19	8
27 Sunday ..	8	25	8	41	27	10	9	20	9	36	25	3	7	7	7	23	19	7
28 Monday..	8	58	9	15	27	6	9	53	10	10	24	10	7	41	8	0	19	5
29 Tuesday..	9	29	9	45	27	2	10	24	10	40	24	5	8	15	8	32	19	1
30 Wednesday	10	0	10	15	26	6	10	56	11	10	23	7	8	51	9	6	18	8
31 Thursday.	10	31	10	48	25	3	11	26	11	43	22	1	9	37	9	56	17	10

The above are in Greenwich Mean Time, if local Time be required for
 Cardiff, *sub.* 13m. —Glo'ster, *sub.* 10m.—Ilfracombe, *sub.* 16m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter.. 3rd, 0h. 14m. p.m. | First Quarter. 17th, 11h. 46
 New Moon .. 10th, 8h. 23m. p.m. | Full Moon .. 25th, 2h. 50

M. D.	WEEK DAYS.	Llanelly.				Newport.				Pembroke			
		Morn.	Even.	Height		Morn.	Even.	Height		Morn.	Even.	Height	
		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.	
1	Tuesday..	9 47	10 6	17 10		10 30	10 47	23 2		9 47	10 6	17 10	
2	Wednesday..	10 25	10 46	16 10		11 4	11 23	21 9		10 25	10 46	16 10	
3	Thursday..	11 8	11 32	16 1		11 45	..	20 5		11 8	11 32	16 1	
4	Friday ..	12 0	..	15 7		0 13	0 45	19 8		12 0	..	15 7	
5	Saturday..	0 29	1 1	15 9		1 15	1 50	19 11		0 29	1 1	15 9	
6	Sunday ..	1 35	2 10	16 6		2 22	2 54	21 2		1 35	2 10	16 6	
7	Monday..	2 44	3 15	17 9		3 26	3 59	23 1		2 44	3 15	17 9	
8	Tuesday..	3 45	4 12	19 2		4 32	5 0	25 6		3 45	4 12	19 2	
9	Wednesday	4 37	5 5	20 8		5 27	5 56	27 10		4 37	5 5	20 8	
10	Thursday..	5 34	5 59	21 9		6 25	6 50	29 8		5 34	5 59	21 9	
11	Friday ..	6 23	6 46	21 11		7 15	7 40	30 2		6 23	6 46	21 11	
12	Saturday..	7 11	7 35	22 4		8 4	8 28	30 9		7 11	7 35	22 4	
13	Sunday ..	7 58	8 21	22 3		8 51	9 13	30 8		7 58	8 21	22 3	
14	Monday..	8 45	9 10	21 11		9 35	9 57	30 2		8 45	9 10	21 11	
15	Tuesday..	9 35	10 0	21 2		10 19	10 41	28 10		9 35	10 0	21 2	
16	Wednesday	10 22	10 44	20 0		11 0	11 20	29 1		10 22	10 44	20 0	
17	Thursday..	11 8	11 32	18 8		11 45	..	24 9		11 8	11 32	18 8	
18	Friday ..	12 0	..	17 5		0 12	0 43	22 8		11 59	..	17 5	
19	Saturday..	0 29	1 2	16 9		1 15	1 51	20 8		0 29	1 2	16 9	
20	Sunday ..	1 42	2 22	16 10		2 28	3 6	21 9		1 42	2 22	16 10	
21	Monday..	3 0	3 31	17 6		3 43	4 16	22 10		3 0	3 31	17 6	
22	Tuesday..	4 2	4 27	18 6		4 51	5 19	24 4		4 2	4 27	18 6	
23	Wednesday	4 57	5 24	19 4		5 48	6 15	25 9		4 57	5 24	19 4	
24	Thursday..	5 48	6 10	19 9		6 39	7 2	26 7		5 48	6 10	19 9	
25	Friday ..	6 30	6 50	20 0		7 22	7 44	26 10		6 30	6 50	20 0	
26	Saturday..	7 7	7 24	20 2		8 0	8 17	27 3		7 7	7 24	20 2	
27	Sunday ..	7 42	7 58	20 1		8 35	8 51	27 1		7 42	7 58	20 1	
28	Monday..	8 16	8 35	19 11		9 8	9 25	26 8		8 16	8 35	19 11	
29	Tuesday..	8 50	9 7	19 7		9 39	9 55	26 3		8 50	9 7	19 7	
30	Wednesday	9 26	9 41	19 2		10 11	10 25	25 6		9 26	9 41	19 2	
31	Thursday..	10 12	10 31	18 4		10 41	10 58	24 0		10 12	10 31	18 4	

The above are in Greenwich Mean Time, if local Time be required
 Llanelly, *sub.* 16m.—Newport, *sub.* 12m.—Pembroke Dock, *sub.* 20

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter.. 3rd, 0h. 14m. p.m. | First Quarter. 17th, 11h. 46m. a.m.
 New Moon .. 10th, 8h. 23m. p.m. | Full Moon .. 25th, 2h. 50m. a.m.

M. WEEK D. DAYS.	Swansea.						Liverpool.				London.				Equation of Time.	Moon's Trans- ait.		
	Morn.		Even.		Height		Morn.		Even.		Morn.		Even.					
	H.	M.	H.	M.	P.	I.	H.	M.	H.	M.	H.	M.	H.	M.			M.	s.	H.	M.
1 Tues ..	9	37	9	56	17	4	2	30	2	48	5	24	5	43	10	52		4m18
2 Wednes	10	15	10	36	16	3	3	8	3	31	6	3	6	24	10	29		5
3 Thurs..	10	58	11	22	15	4	3	53	4	19	6	47	7	10	10	6		5 43
4 Friday..	11	50	..	14	10		4	52	5	26	7	36	8	8	9	42		6 26
5 Satur..	0	19	0	51	15	0	6	2	6	41	8	44	9	17	9	17		7 9
6 Sunday	1	25	2	0	15	10	7	13	7	44	9	51	10	22	8	52		7 55
7 Mon ..	2	34	3	5	17	3	8	13	8	40	10	54	11	25	8	26		8 44
8 Tues ..	3	35	4	2	18	11	9	6	9	29	11	53	..		8	0		9 36
9 Wednes	4	27	4	55	20	7	9	50	10	13	0	29	0	43	7	33	Add to Mean Time.	10 32
10 Thurs..	5	24	5	49	21	10	10	37	11	0	1	5	1	30	7	6		11 32
11 Friday..	6	13	6	36	22	1	11	23	11	47	1	55	2	16	6	38		0a34
12 Satur..	7	0	7	25	22	6	..		0	12	2	39	3	2	6	10		1 35
13 Sunday	7	48	8	11	22	5	0	36	1	0	3	26	3	49	5	42		2 34
14 Mon ..	8	35	9	0	22	1	1	23	1	46	4	12	4	35	5	13		3 31
15 Tues ..	9	25	9	49	21	2	2	10	2	35	4	58	5	23	4	44		4 24
16 Wednes	10	12	10	34	19	10	3	1	3	26	5	49	6	16	4	15		5 15
17 Thurs..	10	58	11	22	18	4	3	50	4	19	6	42	7	7	3	46		6 5
18 Friday..	11	49	..	16	11		4	51	5	26	7	36	8	7	3	16		6 54
19 Satur..	0	19	0	52	16	2	6	2	6	42	8	42	9	17	2	46		7 42
20 Sunday	1	32	2	12	16	3	7	19	7	54	9	52	10	28	2	16		8 32
21 Mon ..	2	50	3	21	17	0	8	27	8	54	11	5	11	39	1	47		9 22
22 Tues ..	3	52	4	17	18	2	9	21	9	43	..		0	7	1	17		10 13
23 Wednes	4	47	5	14	19	1	10	6	10	28	0	35	0	58	0	47		11 4
24 Thurs..	5	38	6	0	19	7	10	50	11	11	1	23	1	46	0	17		11 54
25 Friday..	6	20	6	40	19	10	11	30	11	51	2	7	2	27	0	13		morn.
26 Satur..	6	57	7	14	20	0	..		0	8	2	46	3	6	0	43	Sub. from Mean	0 42
27 Sunday	7	32	7	48	19	11	0	25	0	43	3	22	3	38	1	13		1 29
28 Mon ..	8	6	8	25	19	9	1	0	1	18	3	56	4	12	1	42		2 14
29 Tues ..	8	40	8	57	19	5	1	36	1	51	4	30	4	48	2	12		2 57
30 Wednes	9	16	9	31	18	11	2	7	2	26	5	3	5	20	2	41		3 40
31 Thurs..	10	2	10	21	17	11	2	42	3	0	5	39	5	56	3	10		4 21

The above are in Greenwich Mean Time, if local Time be required for
 Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PORT CHARGES, &c.

APPLEDORE.

Mooring, 1s.

Pilotage, as per agreement.

BARNSTAPLE.

Keelage, 4d. per ton register.

Pilotage, as per agreement

BIDEFORD.

Harbour Dues.—Vessels discharging at public quay, $\frac{1}{4}$ d. per ton register, at private wharf, 2s. 6d.

Pilotage, as per agreement.

BRIDGWATER.

Pilotage.

From the extreme limits of the navigation in the Bristol Channel, or from any point between such extreme limits and Burnham Church, to the Town or to any point between the Black Rock and the Town, the vessel being safely moored;—also from the Town to the limits of the navigation, or to any point between Burnham Church and the said limits, the following Rates, viz.:—

			£	s.	d.
On vessels of 30 tons and under	.....		0	6	6
On vessels above 30 tons and under 50 tons.			0	8	0
„ 50	„ 65	....	0	10	0
„ 65	„ 80	....	0	12	6
„ 80	„ 100	....	0	15	0
„ 100	„ 120	....	1	0	0
„ 120	„ 150	....	1	11	0
„ 150	„ 200	....	2	11	0
„ 200	„ 300	....	3	6	0
„ 300	„	.....	4	1	0

Bridgwater, continued.

From Burnham Church, or from any point between Burnham Church and the Town, to the Town, or to any intermediate point, the vessel being safely moored, and *vice versa*.

	£	s.	d.
On vessels of 30 tons and under	0	4	6
On vessels above 30 tons and under 50 tons.	0	5	6
" 50 " 65	0	6	6
" 65 " 80	0	7	6
" 80 " 100	0	8	6
" 100 " 120	0	10	6
" 120 " 150	1	6	0
" 150 " 200	2	1	0
" 200 " 300	2	11	0
" 300 " 	3	4	0

The above Rates are subject to a reduction of one-fourth part in respect of vessels towed by steam vessels.

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first-mentioned ships shall, by any order of Her Majesty's Most Honourable Privy Council, be privileged to enter the ports of this kingdom, upon paying the same Dues of Tonnage as are paid by British ships; in which case, such ships and vessels not having British registers, shall pay the like Rates of Pilotage only, as are payable by ships having British registers.

If a master choose to employ a pilot for a tide in the navigation, the pilot shall be entitled to receive for such service, two shillings and sixpence for each tide.

Towage.

To or from Burnham, Black Rock, or any intermediate Place, where a vessel shall stop or get aground (*for one tide only*;) viz:—
Vessels—Light, under one hundred tons register, 3d. per ton; ditto, above 4d. per ton. (If any goods, 1d. per ton extra.)

Vessels with coal or culm, under 10 feet of water, 3d. per ton; 10 feet, 4d. per ton; 12 feet, 5d. per ton.

Vessels with merchandize, or ballast, 4d. per ton; 10 feet of water, 5d. per ton; 11 feet, 6d. per ton; 12 feet 7d. per ton.

To or from the Gore to Burnham, or any intermediate place, 3d. per ton. To or from Burnham to Cumbwitch, or any intermediate place, 3d. per ton.

Two-pence per ton over the above rates will be charged for towing up, in all cases where other tugs are employed to tow down.

Should any vessel require a tug, or aid for more than one tide, such assistance must be paid for in addition to the above rates, according to the services rendered.

Harbour Dues.

One penny per ton register, with 1s. fee for moorage.

*Bridgwater, continued.***Tonnage Rates.****First Class**—Vessels entering with cargoes or departing with **carg**

INWARDS. —For every ship or other vessel which shall enter the said basin, from any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney, and Sark—per ton measurement	..	0
From any other part of Europe except places within the Straits of Gibraltar, and round the North Cape, and from all British Colonies—per ton measurement	..	0
From any port or place in Europe round the North Cape, any port or place within the Straits of Gibraltar whether in Europe, Asia, or Africa, and any port or place in the United States of America—per ton measurement	.. .. .	0
From any port or place in any other part of the world—per ton measurement	.. .. .	0

OUTWARDS. —For every ship or vessel which shall depart from the said basin to any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey Jersey, Alderney, and Sark,—per ton measurement	.. ..	0
To any other port of Europe, except places within the Straits of Gibraltar, and round the North Cape, or to any British Colony,—per ton measurement..	.. ..	0
To any port or place in Europe round the North Cape, any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa; any port or place in the United States of America—per ton measurement	..	0
To any port or place in any other part of the world—per ton measurement ..	:	0

Second Class—Vessels entering without cargoes or in ballast

For every ship or other vessel which shall enter into the said basin—per ton measurement 0

Third Class—For every ship or other vessel with a cargo which shall enter the said basin and depart therefrom without breaking bulk, or which shall discharge and afterwards take on board and depart with the same cargo—per ton measurement 0 4

And in estimating the dues contained in this schedule, every vessel of less burthen than twenty tons measurement, shall be rated at twenty tons measurement.

Extra basin dues for overtime—For every coal vessel remaining in the basin beyond ten days, for every coasting vessel beyond fourteen days, and for every foreign vessel beyond thirty days from the time of their respectively entering the same—per ton measurement, per month.. 0 2

BRISTOL.

Rates or Fares for Pilotage.

	If 80 and under 100 tons.		If 100 and under 300 tons.		If 300 and under 500 tons.		If 500 and under 600 tons.		If 600 and under 800 tons.		If 800 and under 1000 tons.		If 1000 tons and upwards.	
	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.
BETWEEN														
Lundy and Coombe	1	1 0	1	8	1	15 0	2	2 9 0	2	16	3	3 0	3	10
Lundy and Swansea or Minehead	2	2 0	2	16	3	10 0	4	4 18 0	5	12	6	6 0	7	0
Lundy and Bridgwater, Cardiff, or the Holmes	2	12 6	3	10	4	7 6	5	6 2 6	7	0	7	17 6	8	15
Lundy and Newport or Kingroad	3	3 0	4	4	5	5 0	6	7 7 0	8	8	9	9 0	10	10
Coombe and Minehead	1	1 0	1	8	1	15 0	2	2 9 0	2	16	3	3 0	3	10
Coombe and Bridgwater, Cardiff, or the Holmes	1	11 6	2	2	2	12 6	3	3 13 6	4	4	4	14 6	5	5
Coombe and Newport or Kingroad	2	2 0	2	16	3	10 0	4	4 18 0	5	12	6	6 0	7	0
Minehead and Bridgwater, Cardiff, or the Holmes	0	10 6	0	14	0	17 6	1	1 4 6	1	8	1	11 6	1	15
Minehead and Newport or Kingroad ..	1	1 0	1	8	1	15 0	2	2 9 0	2	16	3	3 0	3	10
Between any of the following places:— Portishead, Kingroad, Hungroad, Broad Pill, Cumberland or Bathurst Basins, and any other of such places*	0	10 0	0	15	1	0 0	1	1 10 0	1	15	2	0 0	2	5
Between any two of the following places, viz:—Bridgwater, Cardiff, the Holmes, Newport and Kingroad	0	10 6	0	14	0	17 6	1	1 4 6	1	8	1	11 6	1	15

* If under 80 tons, 7s. 6d.

*Bristol, continued.***Harbour Dues.**

	£
For every vessel trading from Africa, Honduras, Surinam, and other Ports in South America the United States of America, the East and West, Indies, all the Ports within the Straits of Gibraltar, the Southern Whale Fishery, the British Colonies, Portugal, Prussia, Russia, Spain, without the straits, and Sweden—per ton	0
For every Vessel trading from Flanders, France, without the Straits, Germany, Guernsey, Holland, Jersey, Norway, Poland, and Zealand—per ton	0
For every Vessel trading from Ireland, the Isle of Man, Scotland, or as a Coaster not including vessels from Cardiff, Newport, and other Ports to the Eastward of the Holmes—per ton	0
For every Vessel from Cardiff, Newport, or any other Port to the Eastward of the Holmes (not being vessels one-third part of the lading of which shall consist of coal scroff, iron, tin, tin plates, grain, copper, bricks, stone, coal, tar, slate, bark, timber, or wood,) as follows :—	
If such Vessel shall be under forty tons burthen—for each voyage	0 1
If such Vessel shall be forty tons burthen, and under seventy-five tons—for each voyage	0 12
If such Vessel shall be seventy-five tons burthen, and under one hundred tons—for each voyage	0 16
If such Vessel shall be one hundred tons burthen or upwards—for each voyage	1 1
For every Vessel from Cardiff, Newport, or any other Port to the Eastward of the Holmes, one-third part of the lading of which shall consist of coal, scroff, iron, tin, tin plates, grain, copper, bricks, stone, coal, tar, slate, bark, timber, or wood, as follows :—	
If such Vessel shall not exceed seventy-five tons burthen—for each voyage	0 5
If such Vessel shall exceed seventy-five tons burthen—for each voyage	0 7

N.B.—There are no Dock Rates or other Port Charges payable on Vessels leaving the Port of Bristol.

BRITON-FERRY.**River Pilotage.**

Vessels drawing	£.	s.	d.	Vessels drawing	£.	s.	d.
7 feet and under	0	7	0	11½ feet	0	14	0
7½ feet	0	8	0	12 "	0	15	0
8 "	0	10	0	12½ "	0	15	6
8½ "	0	11	0	13 "	0	18	0
9 "	0	11	2	13½ "	1	0	0
9½ "	0	11	6	14 "	1	4	0
10 "	0	12	0	14½ "	1	7	0
10½ "	0	12	6	15 " and upwards.	1	17	0
11 "	0	13	0				

Towage.

Under 150 tons register	Inwards	1½d. per ton register
" 150 "	Outwards	2d. "
Over 150 in and out		2d. "

Harbour Dues.

Coastwise or Foreign	1½d. per ton register
Layrage	1s. 6d. each vessel

Loading Charges.

Trimming coal, on cargo	2½d. per ton
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Discharging Ballast.

Without reference to quantity—about 1½d. per ton on cargo.

BURRY PORT.**Harbour Dues.**

For every ship, barge, boat, or other vessel, coming into or going out of the harbour of Burry Port according to its tonnage, (except seeking freight) the sum of fourpence per ton.

For every ship, barge, boat, or other vessel running into the inner harbour by stress of weather, and not unloading, the sum of sixpence per ton, and the outer harbour, the sum of fourpence per ton.

For every ship, barge, boat, or other vessel, coming into the inner harbour from stress of weather, and lying longer than seven days, the sum of threepence per ton per day, and into the outer harbour the sum of twopence per ton per day.

For every ship, barge, boat, or other vessel, coming into the outer harbour to seek a freight, of whatever tonnage, and not remaining beyond three days, the sum of one shilling.

For every day exceeding three days, one shilling per day.

*Burry Port, continued.***Stemming Rates.**

Vessels not exceeding 20 tons register, 6d.; 50 tons, 1s.; 70 tons, 1s. 6d.; 100 tons, 2s.; exceeding 100 tons, 2s. 6d.

Ballast.

For wheeling, per ton register, Outer Harbour, 1d.; Inner Harbour, 1½d.

For use of planks, barrows, and wagons—

	s.	d.		s.	d.
Not above 100 tons register	1	6	Not above 350 tons register	3	6
„ 150	2	0	„ 400	4	0
„ 200	2	6	Above 400	4	6
„ 300	3	0			

Men to be allowed 1s. for assisting to trip the basket, and the same extra charge for the use of crane and tubs, if required.

For Pilotage, see Llanelly.

BURNHAM.

Harbour Dues, 2d. per ton register. Beacons, 4s. per vessel.

Pilotage, as per agreement.

CARDIFF.**Pilotage Rates.**

The limit of this Pilotage is the Port of Cardiff and that portion of the Bristol Channel which lies eastward of Lundy Island, up to and including Kingroad and the River Rhymney to Rhymney Bridge. This Pilotage is not compulsory, but may be obtained over all or any portion of this district, at the discretion of the Masters of Vessels.

Harbour Pilotage.—Every licensed pilot employed in taking a ship or vessel between any dock or harbour in the Port of Cardiff and any point in Cardiff Roads, or *vice versa*, shall be paid according to the registered tonnage of such vessel, as follows:—

FOR LADEN VESSELS.			£	s.	d.
If under 60 tons	.....		0	5	0
60 tons and under 100 tons	.....		0	7	6
100 „ 200 tons	.....		0	12	6
200 „ 300 tons	.....		0	17	6
300 „ 400 tons	.....		1	1	0
400 „ 500 tons	.....		1	5	0
500 „ 600 tons	.....		1	7	6
600 „ 800 tons	.....		1	10	0
800 „ 1000 tons	.....		1	15	0
1000 tons and upwards	.....		2	0	0

For all vessels in ballast, the charges to be one-fifth less than the above rates.

Cardiff, continued.

Channel Pilotage.—Any ship or vessel sailing to or from the Port of Cardiff, upon or in the waters of the Bristol Channel between Lundy Island and King Road, for which the services of a duly licensed pilot may be required and rendered, shall pay according to the registered tonnage of such vessel, as follows:—

FOR LADEN VESSELS.

	1st Limit.	2nd Limit.	3rd Limit.
	£ s. d.	£ s. d.	£ s. d.
If under 100 tons	0 7 6	0 17 6	1 5 0
100 tons and under 200 tons....	0 10 0	1 5 0	1 15 0
200 " 300 tons....	0 15 0	1 12 6	2 10 0
300 " 400 tons....	0 17 6	1 17 6	2 17 6
400 " 500 tons....	1 0 0	2 2 6	3 5 0
500 " 600 tons....	1 2 6	2 7 6	3 15 0
600 " 800 tons....	1 5 0	2 15 0	4 5 0
800 " 1000 tons....	1 10 0	3 5 0	5 5 0
1000 tons and upwards.....	1 15 0	3 15 0	6 0 0

For all vessels in ballast, the charges to be one-fifth less than the above rates.

FIRST LIMIT.—Between Cardiff Roads and Nash or King-road, or any point east of Nash, and west of King-road.

SECOND LIMIT.—Between Cardiff Roads and Combe, or any point west of Nash and east of Combe.

THIRD LIMIT.—Between Cardiff Roads and Lundy Island or any point west of Combe.

An pilot who may be required to remain on board any ship or vessel for the convenience of the captain, master, owner or agent, after he shall have discharged the duties for which he was engaged, shall be paid ten shillings per day for every day he may be employed, and any pilot who may be required to move any ship or vessel from one dock or tidal harbour to another dock or tidal harbour, occupying only one tide, shall be paid for every ship

	s.	d.
Not exceeding 100 tons register	5	0
100 and not exceeding 300 " 	10	0
300 " 500 " 	12	6
500 " 800 " 	17	6
800 and upwards	25	0

Every captain, master, owner, or agent of any ship or vessel employing a pilot shall, in addition to the aforesaid charges, pay a Clerk or Collector's fee, as follows:—

	s.	d.
On all ships not exceeding 100 tons register	0	6
From 100 " 300 " 	1	0
" 300 " 500 " 	1	6
" 500 " 800 " 	2	0
" 800 and upwards	2	6

Cardiff, continued.

If from stress of weather or accident, any ship or vessel be compelled to bear up and return from the westward, the pilot in charge shall, upon completion of his engagement, be entitled to one-third pilotage, for the distance for which he may have been engaged, in addition to the fixed rates.

Towage.

Inwards, in ballast	1½d. per ton register
„ with cargo	2d. „
Outwards „	2d. per ton

Town Dues.

Under 60 tons register	2s. 6d. per vessel
Above 60 tons register	5s. 0d. „

Loading Charges.

Trimming coal (single deck)	2½d. per ton cargo
„ (double deck)	3d. „
Wharfage on cargo	2d. „

Discharging Ballast.

Vessels under 200 tons	5d. per ton on quantity
200 tons and under 400 tons	6d. „
400 „ 600 tons	7d. „
600 „ 800 tons	8d. „
800 and upwards	9d. „

Tonnage Rates.—Bute Docks.

FIRST CLASS. —On all sailing or steam vessels entering with a. d. cargoes from or departing with cargoes for any Port in the United Kingdom, Isle of Man, Jersey, Guernsey, Alderney, and Sark, under 100 tons register				per register ton	0 1½
100 tons and under 200 tons register				ditto	0 2
200 tons register and upwards (except steam vessels..)				ditto	0 3
Steam vessels 200 tons register and upwards				ditto	0 2
Rent, after three weeks from date of entrance,				per register ton, per week	0 0½
SECOND CLASS. —On all sailing or steam vessels with cargoes from or departing with cargoes for any Port in Europe, between the North Cape and Cape Finisterre..				per register ton	0 5
Rent, after three weeks from date of entrance,				per register ton per week	0 0½
THIRD CLASS. —On all sailing or steam vessels with cargoes from or departing with cargoes for any Port in Europe, and the Mediterranean				per register ton	0 7
Rent, after three weeks from date of entrance,				per register ton per week	0 0½

Cardiff, continued.

FOURTH CLASS. —On all sailing or steam vessels with cargoes from or departing with cargoes for all other Foreign Ports whatsoever		per register ton	0	9
Rent, after three weeks from date of entrance,		per register ton per week	0	0½
FIFTH CLASS. —On all sailing or steam vessels entering light, or in ballast, and departing in ballast.....		per register ton	0	3
Rent, after three weeks from date of entrance,		per register ton per week	0	0½
SIXTH CLASS. —On all sailing or steam vessels which shall enter laden, and depart without breaking bulk; or which shall discharge and reload, and depart with the same cargo		per register ton	0	6
Rent, after three weeks from date of entrance,		per register ton per week	0	0½
On every boat, barge, or other craft, which shall enter from the Glamorganshire Canal, and pass through the Dock into the Bristol Channel.....		per register ton	0	6
On every ship, boat, barge, craft, lighter, or other vessel, which shall enter the ship canal, basin, or dock, for the purpose of unloading from, or discharging goods, wares, and merchandise, on board of any ship, boat, barge, craft, lighter or other vessel, being within the said ship canal, basin, or dock; such and the like rates and duties, upon the goods so discharged or loaded, as are taken for wharfage rates, on goods to be landed or loaded upon, or from the wharfs, or quays, of the dock, basin, or jetties.				
On all steam or other vessels, which do not enter within the sea gates of the docks, but which shall either discharge or receive passengers or goods, upon any of the piers, or jetties, outside those gates		per register ton	0	2
Bute Tidal Harbour.				
On all sailing or steam vessels, discharging or loading,		per register ton	0	0½

CARMARTHEN.**Harbour Dues.**

	s.	d.		s.	d.
Vessels under 30 tons	1	0	Vessels 80 to 90 tons	2	6
30 to 60 tons	1	6	90 to 110 tons	3	0
60 to 80 tons	2	0	110 tons and upwards	5	0

Pilotage, as per agreement.

CHEPSTOW.**Harbour Dues.**

One penny per ton register, on all vessels loading or unloading alongside a wharf; also, on all vessels entering or departing the river, if from or to the eastward of the Holmes, 4d.; from or to the westward of the Holmes, 2s. 4d.

Pilotage.—The same as Gloucester.

CLOVELLY.**Harbour Dues.**

Vessels not exceeding 20 tons, 1s.; 20 to 50 tons, 2s.; above 50 tons, 4d. per ton.

Pilotage, &c., as per agreement.

GLOUCESTER & BERKELEY CANAL.**Rates of Tonnage,**

Charged upon gross and register weight, and on the ton of 20 cwt. of 112 lbs.

IMPORTS.					Foreign.		Coast-wise.	
					s.	d.	s.	d.
ALE, beer, porter, cider and perry, per brl. of 36 galls.					0	4	0	4
— ditto, in bottle .. ..	..	..	..	per dozen	0	1	0	1
Barilla .. ..	..	..	..	per ton	1	6	1	0
Bricks, for building .. ..	..	..	..	per 1000	2	0	2	0
— scouring, fire, and tiles .. ..	..	..	..	per ton	2	0	1	0
Brimstone .. ..	..	..	..	..	1	6	1	0
Bones .. ..	..	..	..	..	1	0	1	0
Burr stones .. ..	..	..	..	..	1	6	1	0
Clay .. ..	..	..	..	..	0	6	0	6
Coals .. ..	..	..	..	..	0	6	0	6
CORN AND MEAL								
Wheat, and all corn and seed .. ..	..	..	..	..	1	9	1	6
Flour and other meal .. ..	..	..	..	..	2	0	2	0
Bran and gurgeons .. ..	..	..	..	..	1	6	1	6
Earths .. ..	..	..	..	..	1	0	1	0
Gunpowder .. ..	..	..	..	..	5	0	5	0
Kelp .. ..	..	..	..	..	1	6	1	6
Marble .. ..	..	..	..	per ton of 14 cubic ft.	1	6	1	6
Manure .. ..	..	..	..	.. per ton	1	0	1	0
METALS AND ORES								
Copper, spelter, tin, zinc and manganese ..	..	..	..	..	2	0	0	9
Metallic ores .. ..	..	..	..	..	0	9	0	6
Pig iron, and old or loose iron .. ..	..	..	..	..	2	0	0	9
All other descriptions of iron .. ..	..	..	..	..	2	0	0	9

*Gloucester and Berkeley Canal, continued.*IMPORTS, *Continued.*

				Foreign.		Coasting	
				s.	d.	s.	d.
Oil cake	..	..	.. per ton	1	6	1	0
Oysters	..	..	per ton of 10 bushels	1	6	1	6
Potatoes	..	..	.. per ton	1	0	1	0
Slates, for roofing	..	..	..	2	0	1	6
— for draining	..	..	..	2	0	1	0
— slabs, for paving, &c.	..	..	..	2	0	1	0
Stones, for roads, pitching, lime, chalk, flint,							
gravel, and sand	..	..	..	0	6	0	6
— for building, block, paving, &c.	..	..	..	1	0	1	0
— burr stones	..	..	..	1	6	1	0
Spirits and wine	..	..	per pipe, pun. or butt	2	6	2	6
—	..	..	per half ditto or hogshead	1	3	1	3
—	..	..	all casks under	0	6	0	6
— in bottle	..	..	.. per dozen	0	1	0	1
WOOD AND WOOD GOODS							
Mahogany and fine woods*	..	..	.. per ton	2	0	2	0
Other timber and poles†	..	..	..	1	6	1	6
Lathwood	..	..	.. per fathom of 4 feet	2	0	2	0
Deals and battens, per Petersburg standard of							
120, 12 ft. long, 11 in. wide, and 1½ in. thick				3	4	3	4
Staves, Baltic pipe	..	..	.. per 120	3	6	3	6
— Puncheon and hogshead	..	..	..	3	0	3	0
— Quebec standard	..	..	..	1	6	1	6
— Barrel	..	..	..	1	0	1	0
— West India Pun.	..	..	..	0	6	0	6
— New Brunswick small	..	..	..	0	3	0	3
Laths	..	..	.. per 1000	0	4	0	4
UNENUMERATED ARTICLES	..	..	.. per ton	2	0	1	0

EXPORTS.

Bark	..	..	.. per ton	0	6	1	0
Bricks of all kinds	..	..	..	0	6	0	6
Clay	..	..	..	0	6	0	6
Coals	..	..	..	0	6	0	6
Corn, flour, and meal	..	..	..	0	6	0	6
METALS AND ORES							
Metallic ores	..	..	..	0	6	0	6
“Puddle bars,” Pig Iron, and rough							
cast-iron pipes	..	..	..	0	6	0	6
All other description of iron and metals	..	..	..	0	6	0	9
Salt	..	..	..	0	6	0	6
UNENUMERATED ARTICLES	..	..	..	0	6	1	0

* Mahogany, Oak, Ash, Elm, Beech, and other heavy Timber or Wood, 40 feet to the ton.

† Fir, Pine, Deal, and light Woods, 50 feet to the ton.

*Gloucester and Berkeley Canal, continued.***Regulations.**

Tonnage.—One half of the above Rates shall be charged upon goods conveyed along any part of the canal between the Stroud Junction and Sharpness Point, or the Stroud Junction and Gloucester, excepting goods coming under the operation of the 8th, 9th, or 10th, regulations.

If it be proved, to the satisfaction of the toll collectors, that the full rate of tonnage has been paid upon any goods which have passed along the canal, half the full tonnage only shall be charged on such goods repassing along the canal, unless such half rate shall exceed the amount of the export rate, in which case the export rate upon such goods shall be charged.

All goods brought into the canal for sale, and not sold, and then exported in the same bottom, without being landed, shall only be charged with the import rate.

All goods exported in the same bottom or transhipped for export shall be charged with the import rate.

All goods brought into the canal, forming part of a cargo, the original destination of such goods being for any other port than Gloucester, and not landed nor transhipped, shall pass in and out of the canal free of charge, the vessel carrying such goods paying lockage.

All vessels partly laden entering the canal at Sharpness or Gloucester, to complete their cargoes, shall only be charged tonnage rates on the merchandize shipped in the canal, and the usual lockage charges; provided such inward lading is not landed nor transhipped.

All goods brought into the canal, at Gloucester or Sharpness, either by land or water conveyance, and intended for exportation, shall not be charged the tonnage rates until shipped.

All Corn brought to Gloucester from Stroud by the canal shall pay a rate of 4d. per ton, and all Flour, Bran, and Gurgeons so brought, shall pay a rate of 6d. per ton.

All goods brought into the canal at Gloucester, by the Severn, from places above Gloucester, or to the docks at Gloucester, by land carriage, and not conveyed upon the canal below Hempsted Bridge, except goods coming under the 10th regulation, shall pay a rate of 4d. per ton, or the rate by the table, if it be less than 4d.

All Goods simply crossing the canal from the South Wales Railway Quay to the yards on the opposite side, lying to the north of the Salt Warehouses, or *vice versa*, not having previously paid canal dues, shall pay a rate of 2d. per ton.

Wharfage.—Goods remaining upon the wharfs (except the wharf specified in the foregoing regulation,) for above *forty-eight hours*, *twopence* per ton. And all goods remaining upon any of the wharfs, excepting the north wharf, shall be further charged wharfage at

Gloucester and Berkeley Canal, continued.

the rate of *twopence* per ton per week, and at that rate for any part of a week they may so remain after the expiration of the forty-eight hours. And all goods remaining upon the "*North Wharf*," shall be further charged wharfage at the rate of *one shilling* per ton per week, and at that rate for any part of a week they may so remain, after the expiration of the forty-eight hours.

All goods deposited upon the wharf underneath the "*Pillar Warehouse*," upon the west side of the basin, and remaining there longer than twenty-four hours, shall be charged 1d. per ton per day.

Goods, carriages of every description, and all other things, shall only be placed on the wharfs, roads, and premises of the Canal Company in such manner, and on such parts thereof as the officers of the company may direct; and if any goods, carriages, or other things shall be placed contrary to their directions, the officers of the company may remove the same; and wharfage at the rate of 6d. per ton per hour shall be charged, after notice shall have been given to remove the same.

Floatage of Timber.—For timber discharged from vessels into the canal, on the south side of "*Siller's Bridge*," and remaining afloat on the south side of such bridge, after the expiration of thirty days, a floatage rate of one halfpenny per stick per week shall be paid, and in like proportion for any part of a week; and if such timber should be removed to any part of the canal, on the north side of such bridge, a floatage rate of 1d. per stick for the first week after such removal, and 2d. per stick per week afterwards, and in like proportion for any part of a week, shall be paid.

For timber discharged from vessels into the canal, on the north side of "*Siller's Bridge*," and remaining afloat on the north side of such bridge, after the expiration of fifteen days, a floatage rate of 1d. per stick per week shall be paid, and in like proportion for any part of a week; and should it remain afloat on the north side of such bridge longer than twenty-eight days, after the fifteen days, 2d. per stick per week, and in like proportion for any part of a week, shall be paid.

All timber sold and delivered from one merchant to another, and put into the canal from the yards, and floating in the canal or basins two weeks following, shall pay 2d. per stick per week, and in like proportion for the whole time it may remain afloat. And all timber imported in trows or barges discharged into the canal, shall be subject to the same regulation and charge.

No timber shall be permitted to remain afloat, so as to endanger the navigation of any vessel along the canal, or interrupt or render inconvenient the navigation of the canal.

*Gloucester and Berkeley Canal, continued.***Cranafe.**

			£.	s.	d.	
For each lift under 2 tons	..	0	0	3	per ton.	
2 tons and under 5	..	0	0	6	"	
5	6	..	0	10	0	for each lift.
6	7	..	0	12	0	"
7	8	..	0	16	0	"
8	9	..	1	2	0	"
9	10	..	1	10	0	"
10 tons.....			2	0	0	"

All lifts exceeding 10 tons can only be made by special agreement with the Company, and at rates not less than 10s. for every ton above the preceding.

			£.	s.	d.	
10 tons and under 11 tons..		2	0	0	for each lift.	
11	12	..	2	10	0	"
12	13	..	3	0	0	"
13	14	..	3	10	0	"
14	15	..	4	0	0	"

Lockage.—Every vessel passing through the Company's Locks, empty or in ballast, shall pay 1d. per ton on the register tonnage for each lock of water; and every vessel bringing into, or conveying along the Canal, a less quantity of goods than her register tonnage shall pay 1d. per ton per lock, on the difference between the tonnage of the goods on board, and the register tonnage of the vessel—provided that the hold of the vessel is not full.

In all cases of removal of goods, wares, and merchandize, from the Company's Wharfs or Docks, through the locks, upon which the above rates of tonnage have been paid, such further payment only shall be made as will amount to 1d. per ton on the register tonnage of the vessel departing with such goods.

Moorage.—All vessels remaining in the Canal or Basins longer than one calendar month, shall be charged upon the register tonnage, the following rates, viz. ;—One halfpenny per ton per week, if such vessels shall be moored, or remain on the north side of Hempsted Bridge, and one farthing per ton per week, if moored, or remaining in any part of the Canal below Hempsted Bridge.

Lockage and Moorage.—Boats and vessels under twenty tons burthen shall be rated as twenty tons.

Weighing Machine Rates.—For coal, manure, stone, and gravel, 2d. per ton: all other goods, 3d. per ton.

Tracking.—The following scale of charges shall be paid by the masters of vessels for tracking, viz. :—

*Gloucester and Berkeley Canal, continued.**For the whole length of the Canal.*

For vessels under 26 tons 8s. 6d. each way.

" above 26 and not exceeding 150 tons, 4d. per ton.

" above 150 { for 150 tons 4d. "
for the remainder 2½d. "

One-half of the above rates shall be paid to and from the Junction, and ½d. per ton per mile for all intermediate distances.

Ballast.If put on board at the Ballast Banks s. d.
0 8 per ton

If brought in carts, or alongside afloat, either at

Gloucester, or within two miles thereof..... 1 0 ,,

If thus taken in carts or afloat at any other part

of the Canal..... 1 2 ,,

If in the Tidal Basin at Sharpness 1 6 ,,

All ballast not supplied by the ballast contractor will be charged tonnage at the rate of 6d. per ton.

Canal Pilotage.*The Canal Pilots are authorized to demand and take the following Charges for Piloting Vessels up or down the Canal.*

Vessels under 75 tons register 5s. 0d. up or down

Vessels 75 and under 100 tons register.. 7s. 6d. ,,

Register Tonnage		Draft of Water. ft. in.		Charge. s. d.	Register Tonnage		Draft of Water. ft. in.		Charge. s. d.
100	..	11 0	..	10 0	375	..	13 9	..	21 0
125	..	11 3	..	11 0	400	..	14 0	..	22 0
150	..	11 6	..	12 0	425	..	14 3	..	23 0
175	..	11 9	..	13 0	450	..	14 6	..	24 0
200	..	12 0	..	14 0	475	..	14 9	..	25 0
225	..	12 3	..	15 0	500	..	15 0	..	26 0
250	..	12 6	..	16 0	525	..	15 3	..	27 0
275	..	12 9	..	17 0	550	..	15 6	..	28 0
300	..	13 0	..	18 0	575	..	15 9	..	29 0
325	..	13 3	..	19 0	600	..	16 0	..	30 0
350	..	13 6	..	20 0					

And 6d. additional for every three inches draft of water above.

Channel and River Pilotage.**LIMIT.**—The Bristol Channel eastward of Lundy Island, including the River Severn to the City of Gloucester and the River Wye to Chepstow Bridge.

Every licensed pilot employed in piloting vessels to or from the

Gloucester and Berkeley Canal, continued.

Port of Gloucester shall be paid the following Pilotage Rates, according to the register tonnage of the vessel.

		To or from Lundy and									
		Holmes or Cardiff Roads			King Road.			Sharpness.			
		£	s.	d.	£	s.	d.	£	s.	d.	
Under 100 tons	.....	1	10	0	2	0	0	4	0	0	
100 tons and under	200	2	0	0	2	10	0	5	0	0	
200	„	300	2	7	6	3	0	0	6	0	0
300	„	400	2	15	0	3	10	0	7	0	0
400	„	500	3	5	0	4	2	6	8	5	0
500	„	600	3	15	0	4	15	0	9	10	0
600	„	800	4	5	0	5	7	6	10	15	0
800	„	1000	5	0	0	6	5	0	12	10	0
1000 tons and upwards..		5	15	0	7	5	0	14	10	0.	

		To or from Nash Point or Minehead and Holmes or									
		Cardiff Roads			King Road.			Sharpness.			
		£	s.	d.	£	s.	d.	£	s.	d.	
Under 100 tons	.....	1	0	0	1	10	0	3	10	0	
100 tons and under 200		1	5	0	1	15	0	4	5	0	
200	„	300	1	10	0	2	2	6	5	2	6
300	„	400	1	15	0	2	10	0	6	0	0
400	„	500	2	2	6	3	0	0	7	2	6
500	„	600	2	10	0	3	10	0	8	5	0
600	„	800	2	17	6	4	0	0	9	7	6
800	„	1000	3	7	6	4	12	6	10	17	6
1000 tons and upwards..		3	17	6	5	7	6	12	12	6	

			To or from Holmes or Cardiff Roads and					
			King Road.			Sharpness.		
			£	s.	d.	£	s.	d.
Under 100 tons	.....		0	10	0	2	10	0
100 tons and under 200	....		0	12	6	3	2	6
200	„	300	0	15	0	3	15	0
300	„	400	0	17	6	4	7	6
400	„	500	1	2	6	5	5	0
500	„	600	1	7	6	6	2	6
600	„	800	1	12	6	7	0	0
800	„	1000	1	17	6	8	2	6
1000 tons and upwards	.....		2	2	6	9	7	6

To or from King Road and Sharpness—											
		£	s.	d.			£	s.	d.		
Under 40 tons	.....	0	15	0	300 tons and under 400		3	10	0		
40 tons and under 60		1	1	0	400	„	500	4	2	6	
60	„	80	1	11	6	500	„	600	4	15	0
80	„	100	2	0	0	600	„	800	5	7	6
100	„	200	2	10	0	800	„	1000	6	5	0
200	„	300	3	0	0	1000 tons and upwards.		7	5	0	

Gloucester and Berkeley Canal, continued.

Pilots taken on board of any Vessel inward bound to the westward of Ilfracombe, shall be paid the same Pilotage Rates as from Lundy Island; if between the Nash Point and Ilfracombe, the same rates as from the Nash Point; if between the Nash Point and the Holmes, the same rates as from the Nash Point; and if between the Holmes and King Road, the same rates as from the Holmes.

Pilots, discharged from any vessel on the outward voyage between any of the stages mentioned in the above scale of rates, shall be paid the same Pilotage Rates as if they had been taken to the next stage beyond the place where they were discharged.

All Vessels piloted to Chepstow or to Lydney shall pay the same Pilotage Rates as to Sharpness, and vice versa, with the exception of Coal Laden Vessels coastwise to and from Lydney, under 200 tons register, for which a special scale of charges, at a reduced rate, is provided by the 4th Pilotage Bye Law.

Vessels piloted from Sharpness to Lydney, or from Lydney to Sharpness, and then to King Road, shall pay the same rates as between Sharpness and King Road.

Vessels piloted to and from any place in the River Severn above Sharpness shall pay one-fourth more than the rates between Sharpness and King Road.

All Light Vessels between King Road and Sharpness, or any intermediate point, shall be entitled to one-fifth reduction on the full pilotage charges for that portion of the district: and all vessels propelled or towed wholly by steam power, between King Road and Sharpness, or any intermediate point, shall be entitled to a further reduction of one-fourth of the full pilotage charges for that portion of the district

Vessels taking a Pilot from King Road to any place on the river Severn must employ assistants to the Pilot, whose number and payment are regulated by the 6th Pilotage Bye Law.

Vessels retaining a Pilot on board after he has discharged the duties for which he has engaged, or whilst waiting for water up the river Severn, or whilst delayed by contrary winds when outward bound, and vessels in charge of a Pilot compelled to bear up and return from the westward from stress of weather or accident, must compensate him according to the regulations contained in the 7th, 8th, and 9th Pilotage Bye Laws.

In addition to the foregoing charges, a Collector's Fee, varying according to the size of the vessel, from 6d. to 2s. 6d. is payable under the 10th Pilotage Bye Law.

HAVERFORDWEST.

Keelage and Wharfage.—One penny per ton registered tonnage

ILFRACOMBE.**Keelage.**

For every ship or vessel driven in by stress of weather, &c.

Coasters belonging to the port..... 0s. 6d.

„ not belonging to the port .. 1s. 6d.

Vessels going to or coming from any of Her Majesty's Plantations
Asia, Africa, or America, 2s. 6d.

Also, for every vessel paying keelage, the additional sum of 6d
each Top borne by such vessel.

Lighthouse.

For every vessel belonging to the port 0s. 6d.

For every vessel not belonging to the port 1s. 0d.

The Light is kept up from the 1st day of September to the last
of March in every year.

Mooring Chains and Buoys.

Smacks, 1s.

Two-mast vessels, 2s.

Harbour Dues.

Coasting Smacks, 3s. 6d. Schooners, 4s. 6d. Brigs, 5s. 6d.

Foreign going, 1s. extra.

When the Light is out, 6d. each less for vessels belonging to
Harbour, and 1s. each less for vessels not belonging to the Harbour.

LLANELLY.**Pilotage.**

LIMIT No. 1—If a pilot be taken on board as far to the westward
as to bring Rhossilly Church open to the westward of the Holmes,
is to be paid for every foot of water the vessel may draw.

LIMIT No. 2—If taken on board within No. 1, but to the westward
of No. 4 buoy for Pembrey, or No. 6 for Llanelly.

	Limit No. 1.		Limit No. 2.		Outwards.	
	s.	d.	s.	d.	s.	d.
Under 50 tons register ..	1	6	0	9	0	9
From 50 to 75 „ ..	1	9	1	0	1	0
75 to 100 „ ..	2	0	1	3	1	3
100 to 125 „ ..	2	3	1	6	1	6
125 to 150 „ ..	2	6	1	9	1	9
150 to 175 „ ..	2	9	2	0	2	0
175 to 200 „ ..	3	0	2	3	2	3
200 to 225 „ ..	3	3	2	6	2	6

and 3d. per foot for every additional 25 tons register

Pilots taken on board inside buoy No. 6, when bound for Llanelly,
or inside No. 4, when bound for Pembrey, to be paid 2s. 6d. each for
a hobble.

Llanelly, continued.

If any vessel shall evade being boarded by a pilot in Limit No. 1, she shall pay for Limit No. 1, although boarded above that limit, besides the penalty for refusing a pilot.

Every vessel paying 2s. per foot and upwards, shall be taken by the pilot clear of the Holmes, if required.

Each vessel to pay 1s. for the boat.

That when any vessel not exceeding 125 tons register shall have the assistance of a steam-tug in taking her out to sea, a reduction of ten per cent. shall be made on her outward pilotage.

That all vessels proceeding above Llanelly shall pay as follows, in addition to the rates inwards and outwards from Llanelly:—

	To or from Penclawdd			To or from Spitty.			Penclawdd to Spitty	
	s.	d.		s.	d.		s.	d.
Under 50 tons register..	2	6	..	4	0	..	2	6
From 50 to 100 „	3	6	..	6	0	..	3	6
100 to 150 „	4	6	..	8	0	..	4	6
150 to 200 „	6	0	..	9	6	..	6	0

and 6d. for every additional 25 tons register.

Harbour Pilotage.

Under 50 tons, 2s.; 50 and under 75, 2s. 6d.; 75 and under 100, 3s.

For removing vessels between

	Llanelly and Pembrey.			Pembrey and Burry Port.	
	s.	d.		s.	d.
Under 50 tons register ..	3	6	..	3	6
75 „	4	6	..	4	0
100 „	5	6	..	4	6

For every additional 25 tons—Llanelly and Pembrey, 1s.; Pembrey and Burry Port, 6d.

Vessels sailing from the port, and putting back after having discharged their pilots, to pay half pilotage in and out.

Three shillings and sixpence to be the rate charged for a Bar hobble.

“Ceres” Pilot Ship.

That a charge of 2s. 6d. per 100 tons register be made upon every vessel taking a pilot boarded from the “Ceres.”

Ballast Rates.

Every vessel shall pay for every ton discharged, $4\frac{1}{4}$ d.

For each man otherwise employed, $\frac{1}{2}$ d. per ton.

Buoyage Dues.

For every ship or other vessel entering into the rivers Burry, Loughor, and Lliedi, or either of them, from and over the Bar of Burry, 1d. per ton register.

*Llanelly, continued.***Dock Dues.**

Llanelly or New Dock..... 2d. per ton register.
 Copper Works Dock 1d. "
 Carmarthenshire Dock, 1d. per ton register, for vessels entering or
 using the Dock, and 1d. per ton the first week, and a farthing per
 ton every week after, if for repairs or lying up.

LYDNEY.**Tonnage Rates.**

	s.	d.		s.	d.
1 to 10 tons burthen ..	1	0	45 to 50 tons burthen ..	4	6
11 to 20 " ..	2	0	51 to 80 " ..	5	0
21 to 30 " ..	3	0	81 to 100 " ..	6	0
31 to 44 " ..	4	0	101 tons and upwards	7	6

Pilotage.—The same as Gloucester.

MILFORD.**DEFINITION OF LIMITS.**

From Caldy Island along the coast to St. David's Head, and from thence to Cardigan Island, and *vice versa*; and to and from, and into and out of all Ports and Places within these Limits.

Pilotage Rates.

	Under 14 ft. per foot. £ s. d.	14 ft. & up per foot. £ s. d.
<i>From</i> a line drawn from St. Ann's Point to Sheep's Island, to any part of the Harbour below a line drawn from Newton Noyse Point to Martin's Haven.....	0 2 6	0 3 6
<i>From</i> a line drawn from St. Ann's Point to Sheep's Island, or from Habberstone Road, to any place above a line drawn from Newton Noyse Point to Martin's Haven in addition	0 2 0	0 2 6

Vessels inward-bound not boarded until they have passed a line drawn from Rat Island to Watwick Point, are to pay one-fourth less than the foregoing rates, and if not boarded until they have passed a line drawn from Thorne Island to Great Castle Head, they are to pay one-half only of the said rates, and if not boarded until they have passed the Stack Rock, to a line from Newton Noyse Point to Martin's Haven, they are not to be chargeable with any pilotage unless the masters thereof require pilotage assistance.

*Milford, continued.***Additional Rates,***For Ships boarded without the entrance of the Harbour.*

	£	s.	d.
From a line drawn from Leuny Point to Skokham Island,			
in addition, per foot	0	2	0
If to the southward of St. Gowan's Head, ditto	0	1	0
Or from Caldy Island eastward, or from the westward of the Grassholm, or three leagues without Leuny Point, in addition to the Harbour Pilotage	3	3	0
Six leagues, ditto	4	4	0
Ten leagues, ditto	6	6	0

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first-mentioned ships shall by any order of Her Majesty's most Honorable Privy Council, be privileged to enter the ports of this Kingdom upon paying the same duties of tonnage as are paid by British ships, in which case such ships and vessels not having British registers shall pay the like rates of pilotage only as are payable by ships having British registers. The said surplus rate chargeable on unprivileged Foreign vessels is to be paid to the Collector of this Corporation's Light Duties, at the Custom House, Milford.

Port Charges.

	£	s.	d.
Keelage	0	0	4
Making fast to the rings	0	0	6
Quayage and moorage per ton register	0	0	0½
Foreign vessels, loading or discharging, per ton..	0	0	6
Coasting vessels, loading or discharging, per ton..	0	0	2
Loading ballast per ton	0	0	2
Deposit for landing ballast on quay	1	0	0
Ballast lying on the quay, per ton	0	0	0½
Use of beach discharging	0	1	0
Use of beach outfitting or repairing, per ton register	0	0	1
Vessels lying alongside the quay for any period not exceeding one month—per ton register	0	0	2
And for every succeeding month	0	10	0

NEATH.**Tonnage Rates.**

For every ship or vessel which shall anchor, load, or unload within the said port, or which shall be made fast to any pier or other work within the same, or any part thereof, the sum of 1½d. per ton of the register tonnage of such ship or vessel.

*Neath, continued.***Rates of Pilotage.**

	1st Station.			2nd Station.			3rd Station.		
	£	s.	d.	£	s.	d.	£	s.	d.
Vessels drawing 7 feet and under	0	7	0	0	8	0	0	10	0
„ 7½ feet	0	8	0	0	9	6	0	11	6
„ 8 „	0	10	0	0	11	9	0	13	9
„ 8½ „	0	11	0	0	12	0	0	15	0
„ 9 „	0	11	2	0	12	6	0	15	6
„ 9½ „	0	11	6	0	13	2	0	16	8
„ 10 „	0	12	0	0	14	0	0	17	6
„ 10½ „	0	12	6	0	14	9	0	18	3
„ 11 „	0	13	0	0	15	6	0	19	0
„ 11½ „	0	14	0	0	16	6	1	0	0
„ 12 „	0	15	0	0	19	0	1	2	0
„ 12½ „	0	16	6	1	1	0	1	4	0
„ 13 „	0	18	0	1	3	0	1	6	0
„ 13½ „	1	0	0	1	5	6	1	9	0
„ 14 „	1	4	0	1	10	0	1	15	0
„ 14½ „	1	7	0	1	14	0	2	0	0
„ 15 and upwards	1	17	0	2	2	0	2	7	0

FIRST STATION.—From outside of Neath Bar to the Layer, and to any distance between the Layer and Southern end of the Abbey Estate, and *vice versa*.

SECOND STATION.—From outside of Neath Bar to any distance lying between the inner termination of the First Station and the Abbey Pill, and *vice versa*.

THIRD STATION.—From outside of Neath Bar to any distance lying between the Abbey Pill and Neath Bridge, and *vice versa*.

The above Rates include the Charges for Boats and Hobblers.

For conducting vessels from one of the above-named stations to another within the port:—

For vessels under 100 tons	3s.
„ „ 130 „	4s.
„ above 130 „	5s.

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first mentioned ships shall, by any order of Her Majesty's most Honorable Privy Council, be privileged to enter the ports of this kingdom, upon paying the same duties of tonnage as are paid by British ships, in which case such ships and vessels not having British registers shall pay the like rates of pilotage only as are payable by ships having British registers.

Pilot leading the way (if required by the master of the vessel following), entitled to half-pilotage as far as he shall lead.

Pilot from or to the Mumbles (when required by the master), to receive, in addition, 4s.

*Neath, continued.***Rates to Hobbler.**

	s.	d.
Hobbler over the Bar, to or from the Laver or Giant's Grave, or the southern end of the Abbey Estate..	2	6 per vessel
Hobbler over the Bar, to or from Fox's Coal Bank, or the Copper Works, or the Abbey Pill..	3	0 „
Hobbler over the Bar, to or from Melincrythan Wharf or Neath Bridge	4	0 „
Hobbler employed in removing or assisting vessels within the Harbour.	1	6 per tide

Towage Rates and Regulations.**INWARDS.**

	Per ton register.	
	s.	d.
From the Outer Buoy to Laver or Giant's Grave ..	0	1½
„ „ Abbey Coal or Crown Copper Works	0	1½
„ „ Mines Royal Copper Works ..	0	2
„ „ Neath	0	2½

OUTWARDS.

From Giant's Grave or the Laver to Sea or Outward Buoy	0	2
„ Abbey Coal or Crown Copper Works to Sea or Outward Buoy	0	2½
„ Abbey Pill or Mines Royal Copper Works to Sea or Outward Buoy.. .. .	0	2½
„ Neath to Sea or Outward Buoy	0	2½

Vessels that may require to be towed shorter distances, if not having been offered the steamer to tow them the whole distance from where they were laden or going to load, to pay as under:—

From the Laver to Giant's Grave, and <i>vice versa</i> ..	0	0½
„ Abbey Coal or Crown Copper Works..	0	1
„ Abbey Pill or Mines Royal Copper Works	0	1½
„ Neath	0	1½
From Giant's Grave to Abbey Coal or Crown Copper Works	0	0½
„ Abbey Pill or Mines Royal Copper Works	0	1
„ Neath	0	1½
From Abbey Coal or Crown Copper Works to the Pill ..	0	0½
„ „ „ „ Neath	0	1
Light vessels towed from Swansea or Port Talbot to Giant's Grave	0	2
Light vessels towed from Neath Harbour to Swansea or Port Talbot	0	6
Loaded vessels towed to Swansea or Port Talbot (in addition to the rate of towage from the various Stations to the Outward Buoy)	0	3

Neath, continued.

Vessels from 150 tons register and upwards, for towage
in or out, to or from Giant's Grave 3. 0

All Vessels not exceeding thirty tons register to pay 3s. 6d
towage in or out, to or from Giant's Grave.

Three shillings the lowest rate for any towage.

NEWPORT.**Tonnage Rates.**

Coastwise, ½d. per ton register. Foreign, ½d. per ton register

Keelage.

One penny per ton taken on discharged at the Wharves in the River

Tonnage Rates—Docks.

INWARDS. —For every ship or other vessel which shall enter the said dock from any part of Great Britain, Ireland, the Isle of Man, or any part of the Islands of Guernsey, Jersey, Alderney, and Sark, per ton measurement	0
For every other part of Europe, except places within the Straits of Gibraltar and round the North Cape, per ton measurement.	5
From any port or place in Europe round the North Cape, or any port or place with the Straits of Gibraltar, whether in Europe, Asia, or Africa, per ton measurement.	0
From any port or place in British America, any port or place in the United States of America, or any port or place in any other part of the world, per ton measurement.	0 1
For every ship or other vessel, with a cargo, which shall enter the said dock, and depart therefrom, within three weeks from the day of entry, without breaking bulk, or which shall discharge, and afterwards take on board, and depart with the same cargo, within such period of three weeks, per ton measurement (exclusive of the dues under the name of rent,) hereinafter mentioned	6 1
For every ship or other vessel which shall have departed from the said dock, with a cargo, or any part of such cargo laden therein, and shall re-enter the said dock, with the same cargo, or part of such cargo, per ton measurement, (exclusive of the dues under the name of rent hereinafter mentioned)	0 3
OUTWARDS. —For every ship or other vessel which shall depart from the said dock to any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney, and Sark, per ton measurement.	0 2

Newport, continued.

	s.	d.
To any other part of Europe, except places within the Straits of Gibraltar and round the North Cape, per ton measurement	0	5
To any port or place in Europe, round the North Cape, or any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa, per ton measurement	0	4
To any port or place in British America, any port or place in the United States of America, or any port or place in any other part of the world, per ton measurement	0	10
For every ship or other vessel which shall enter the said dock in ballast, or light, and depart therefrom in ballast, or light, per ton measurement (exclusive of the dues under the name of rent, hereinafter mentioned)	0	3

Police and Watchmen.

For all vessels entering or departing from the dock, at per week, or fractional part of a week	1	0
N.B.—Competent watchmen for the protection of vessels and property therein can be obtained on application at the dock-office, the charge for each watchman is per night	3	6

Rent Charges.

All ships and vessels entering the dock in ballast and departing with cargoes not exceeding 400 tons register measurement, to be allowed to remain at the rates before specified for a period of	2 weeks.
Above 400 tons and not exceeding 700 tons register measurement	3 "
Above 700 tons register measurement	4 "
Vessels above 70 tons and not exceeding 700 tons register measurement entering with a cargo and going out with another	4 "
Vessels above 700 tons register measurement entering with a cargo and going out with another	5 "
Vessels above 70 tons register measurement, entering with a cargo and going out without breaking bulk, or which shall discharge, and afterwards take on board and depart with the same cargo	3 "
Vessels under 70 tons register measurement, entering the dock without ballast	4 days

s. d.

All ships and vessels which shall remain in the dock for any longer periods than those respectively above stated, shall be subject (in addition to the rates and dues before stated) to a rent charge of, for the first week, or any portion of a week, per ton register measurement... .. .	0	0½
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Newport, continued.

For the second week or any portion of a week per ton register measurement

For the third week or any portion of a week per ton register measurement

For the fourth week and every subsequent week and for any portion of a week per ton register measurement

N.B.—In estimating the dues contained in the foregoing schedule, every vessel of less than 20 tons register measurement shall be rated at 20 tons register measurement.

Use of Machinery for Shipping or Unshipping

For every ton of coal

For every ton of coke, culm, iron cinders, iron ore, earth or rubbish of any kind

For every ton of metallic (not iron) ore.. .. .

Whenever wagons containing any of the above articles are moved on the railway sidings by hydraulic power in connection with the shipping machines, a charge will be made at the rate per ton, of

All articles, matters or things not included in the above-mentioned, and excepting ballast, will be subject to special agreement and charges.

Persons (other than the crews of vessels on the dock), landing or embarking on the Dock Company's premises, will be subject to a charge per head, of 0

Charges for Discharging and Removing Ballast.

For every ton of ballast that is in the hold within 15 feet abaft, and 15 feet before any hatchway 1

For every ton of ballast exceeding in the hold a greater distance than stated above, an additional sum of 0

An additional charge for working by night will be made at the rate of, per ton.. .. . 0

Rates of Pilotage.

The Limit of this Pilotage is that portion of the Bristol Channel which is eastward of Lundy Island, up to, and includes King Road and the River Usk as far as the Caerleon Bridge. This Pilotage is not compulsory, but may be obtained over all or any portion of this district, at the discretion of the Masters of Vessels.

Every licensed Pilot employed in piloting vessels to or from the Port of Newport shall be paid the following Pilotage Rates, according to the registered tonnage of the vessel.

Newport, continued.

FOR LADEN VESSELS.

		Newport to Mouth of River Usk.			Newport to the Holmes or Cardiff Roads.		
		£	s.	d.	£	s.	d.
If under 100 tons.....		0	10	0	..	0	13 0
100 tons and under 200		0	15	0	..	1	0 0
200	300	0	17	6	..	1	10 0
300	400	1	2	6	..	1	15 0
400	500	1	5	0	..	2	1 0
500	600	1	6	0	..	2	3 0
600	800	1	8	0	..	2	8 0
800	1000	1	10	0	..	2	12 0
1000 tons and upwards.....		1	12	0	..	2	16 0

For all vessels actually engaged in the coasting trade of the United Kingdom, and vessels in ballast the charges to be one-third less than the above.

FOR LADEN AND UNLADEN VESSELS.

		Limit No. 1.			Limit No. 2.			Limit No. 3.		
		£	s.	d.	£	s.	d.	£	s.	d.
If under 100 tons		0	7	6	0	17	6	1	5	0
100 tons and under 200		0	10	0	1	5	0	1	12	6
200	300	0	15	0	1	15	0	2	10	0
300	400	0	17	6	1	17	6	2	17	6
400	500	1	0	0	2	2	6	3	5	0
500	600	1	2	6	2	7	6	3	15	0
600	800	1	5	0	2	15	0	4	5	0
800	1000	1	10	0	3	5	0	5	5	0
1000 tons and upwards..		1	15	0	3	15	0	6	0	0

LIMIT No. 1.—Between the Holmes or Cardiff Roads and Minehead or King Road, or any Point east of Minehead and west of King Road.

LIMIT No. 2.—Between the Holmes or Cardiff Roads and Coombe, or any Point west of Minehead or Nash Point, and east of Coombe.

LIMIT No. 3.—Between the Holmes or Cardiff Roads and Lundy Island, or any Point west of Coombe.

Any Pilot who may be required to remain on board any ship or vessel for the convenience of the captain, owner, or agent, after he shall have discharged the duties for which he was engaged, shall be entitled to be paid ten shillings per day for every day he may be employed; and any Pilot who may be required to move any ship or vessel in the dock, harbour, or river, occupying only one tide, shall be entitled to be paid for every ship

	s.	d.
Under 100 tons	4	0
100 and under 300	5	0
300 " 500	7	6
500 " 800	10	0
800 and upwards	12	6

Newport, continued.

Vessels wind bound in the waters of the Newport District, and retaining the services of a Pilot, shall pay five shillings per diem.

Pilots taken on board of any vessel inward bound to the westward of Ilfracombe, shall be paid the same Pilotage rates as from Lundy Island; but if west of Nash Point or Minehead and east of Ilfracombe the same rates as from the Nash Point; if between the Nash Point and the Holmes, the same rates as from the Nash Point; and if between the Holmes and King Road, the same rates as from the Holmes.

In case any vessel shall be compelled to bear up and return from the westward from stress of weather or accident, the Pilot in charge shall be entitled to, and shall be paid one third of the Pilotage charge in addition, according to the distance such ship or vessel may have reached before she shall have put back.

Every master, owner, or agent of any vessel employing a Pilot, shall, in addition to the foregoing charges, pay a clerk or collector's fee, as follows, viz. :—

	s.	d.
Vessels under 100 tons	0	6
100 and under 300	1	0
300 „ 500	1	6
500 „ 800	2	0
800 and upwards	2	6

PEMBREY.**Ballast Rates.**

Wheeling 1d. per ton register.

Every man employed on board to be paid at the rate of three shillings per day.

Each vessel to pay extra for the use of the planks, barrows, and waggons, viz. :—

	s.	d.
Not exceeding 50 tons register	1	0
„ 100 „	1	6
„ 150 „	2	0
„ 200 „	2	6
„ 300 „	3	0
„ 350 „	3	6
„ 400 „	4	0
Exceeding 400 „	4	6

The same charge extra for the use of the crane and tubs if required.

Harbour Dues.

	s.	d.
For every ship, barge, boat, or other vessel, coming in or going out of the harbour, to load or unload, per ton	0	2

Pembrey, continued.

	s.	d.
For every ship, barge, boat, or other vessel, running into the harbour by stress of weather, and not unloading	0	1
And for every such ship, barge, boat, or other vessel, running into the harbour by stress of weather, for shelter, and lying longer than 7 days, the further sum per ton per day of ..	0	0½
For every ship, barge, boat or other vessel, coming into the harbour to seek a freight of whatever tonnage, the sum of ..	1	0

Stemming.

	s.	d.
Vessels not exceeding 20 tons register	0	6
" 50 " 	1	0
" 75 " 	1	6
" 100 " 	2	0
Exceeding 100 " 	2	6

PENNARD.

Keelage, 4d. per ton register.

PORTHCAWL.**Tonnage Rates.**

Coastwise, 2d. per ton register. Foreign, 4d. per ton register.

Ballast.

Not exceeding 15 tons 6d. per ton register

Exceeding 15 tons..... 4d. " "

Any ship arriving in tow of a steamer, after having discharged her last cargo at a neighbouring port, shall pay 1s. per ton for discharging her ballast, if not exceeding 15 tons; if exceeding 15 tons, 4d. per ton register tonnage.

Pilotage.

From any place between Sker or Nash Points, and inside the sands into the harbour, and out of the harbour, to every such place:

	£.	s.	d.
Per registry under 30 tons	0	4	0
30 and under 40 "	0	5	0
40 " 50 "	0	6	6
50 " 60 "	0	8	0
60 " 75 "	0	10	0
75 " 100 "	0	12	0
100 " 125 "	0	15	0
125 " 150 "	0	18	0
150 " 175 "	1	2	0
175 " 200 "	1	6	0
200 " 225 "	1	10	0
225 tons and upwards	1	14	0

Porthoawl, continued.

And for the use of the pilot boat, every ship using the same :

	s.	d.
Per registry under 75 tons	1	0
75 tons and upwards	2	0

For transporting a ship in the harbour and re-mooring her, or for mooring and unmooring a ship, 1s. 6d. for each pilot, and 9d. for each hobbler.

And if any master of a ship shall engage a pilot and hands to take his ship out of the harbour, and she is not ready to be taken out during that tide, or if after having been moved for the purpose of being taken out she does not proceed, 1s. 6d. for each pilot, and 9d. for each hobbler or assistant.

PORT TALBOT.**Tonnage Rates.**

For every vessel laden 3d. per ton register

For every vessel in ballast.... 2d. ,,

Pilotage.

		From Outer Buoy to destination, if in 1 tide of 3 hrs.			To Outer Buoy from berths, if in 1 tide of 3 hrs.				
		£	s.	d.	£	s.	d.		
Above 25 tons register and under 40..		0	5	0	..	0	4	0	
40	..	50..	0	6	0	..	0	5	0
50	..	60..	0	7	0	..	0	6	0
60	..	70..	0	8	0	..	0	6	10
70	..	80..	0	9	0	..	0	7	8
80	..	90..	0	10	0	..	0	8	6
90	..	100..	0	12	0	..	0	9	10
100	..	120..	0	14	0	..	0	11	6
120	..	140..	0	16	0	..	0	13	2
140	..	160..	0	18	0	..	0	14	10
160	..	180..	1	0	0	..	0	16	6
180	..	200..	1	5	0	..	1	0	0
200	..	250..	1	10	0	..	1	3	6
250	..	300..	2	0	0	..	1	10	4
300	..	350..	2	15	0	..	2	0	8
350	..	400..	3	10	0	..	2	11	4
and for every additional 50 tons		....	0	5	0	..	0	4	0

If inside the outer buoy only one-half of the foregoing rates.

For transporting a vessel from one part of the harbour to another—under 100 tons, 2s. 6d.—above 100 tons, 5s.

The price paid to hobbler not to exceed 2s. for each hobble; and no hobbler shall charge two hobbles, unless occupied for more than three successive hours,

Port Talbot, continued.

For every hobbler engaged by the master, 1s. 6d. from sea into the lock, and 2s. from sea to the wharf of her destination; if required to tow, 6d. additional to each hobbler; if engaged only to the end of the breakwater, half the above rates only to be charged.

Steam Tugs.*To or from the Outer Buoy.*

			£	s.	d.
20 tons register and under	....		0	3	0
above 20 and under 30	.....		0	4	0
30	"	40	0	5	0
40	"	50	0	6	0
50	"	60	0	8	0
60	"	70	0	9	0
70	"	80	0	10	6
80	"	90	0	13	0
90	"	100	0	15	0
100	"	120	0	17	0
120	"	150	1	1	0
150	"	200	1	5	0
200	"	250	1	10	0
250	"	300	2	0	0
300	"	400	2	10	0
400	"	500	3	10	0
500	"	600	4	10	0
and for every additional 50 tons	.....		0	5	0

Stemming fee, 1s.

For use of Harbour Company's tow rope:

			s.	d.
Vessels under 50 tons register burthen	....		1	0
" of 50 tons and under 100	....		3	0
" 100	"	200	3	0
" 200	"	300	4	0
" 300 tons and upwards	.....		5	0

Ballast.

Ballast in the river is free of charge: in the dock 3d. per ton.

For use of planks and barrows, for ten tons and under, 2s.; 10 tons and under 20, 3s. 6d.; and 1s. extra for every 10 tons additional.

For use of the graving bank:—on the hard, 1d. per ton register per week; on the blocks, 1½d. per ton register per week.

SAUNDERSFOOT.

Pilotage.—For every 100 tons in and out, 10s.

Harbour Dues.—2d. per ton register.

*Saundersfoot, continued.***Pier Light and Signal.**

	s.	d.	
20 to 30 tons register	0	3	each vesse
30 to 50 "	0	6	"
50 to 70 "	0	9	"
70 to 100 "	1	0	"
100 to 150 "	1	6	"
150 tons and upwards	2	0	"

Discharging Ballast.

For each man employed on board	1d.	per ton register
For wheeling	1d.	"

Trimming.—2d. per ton.**SWANSEA.****Tonnage Rates.**

For every Vessel bound from and to any Port or place in the United Kingdom, or the Isle of Man, under 150 tons	per ton	0	s.
150 tons and under 250 tons	per ton	0	
250 tons and under 350 tons	per ton	0	
350 tons and upwards	per ton	0	
For every Vessel bound to or from any Port or place in Europe, or any Port or place within the Straits of Gibraltar, under 100 tons	per ton	0	
100 tons and under 250 tons	per ton	0	
250 tons and under 350 tons	per ton	0	
350 tons and upwards	per ton	0	
For every Vessel bound to or from any other Port or place than above specified, under 150 tons	per ton	0	
150 tons and under 250 tons	per ton	0	
250 tons and under 350 tons	per ton	1	0
350 tons and upwards	per ton	1	3

And in respect of Vessels entering in Ballast, and departing with Cargoes, the following Rates.

Vessels bound to Ports in the United Kingdom, or the Isle of Man	per ton	0	3	s. d.
Vessels bound to any Port in Europe, or within the Straits of Gibraltar, under 100 tons.....	per ton	0	3	
100 tons and under 250 tons	per ton	0	5	
250 tons and under 350 tons	per ton	0	6	
350 tons and upwards	per ton	0	7	

Swansea, continued.

		s.	d.
Vessels bound to any other Ports, under 150 tons ..	per ton	0	6
150 tons and under 250 tons	per ton	0	7
250 tons and under 350 tons	per ton	0	9
350 tons and upwards.....	per ton	0	11

Vessels driven in by stress of weather, and remaining over four tides, half the above rates. Vessels remaining over thirty days, unless prevented by embargo or weather, 1d. per ton per week.

Cranage.

	s.	d.
For every lift under 1 ton	0	3 per lift
Net exceeding 2 tons	0	3 per ton
2 to 5 tons	0	6 „
Five tons and upwards	2	0 „

Ballast Rates.

	s.	d.
Discharged at the Ballast Wharves in the Docks	1	0 per ton
Discharged from any vessel into another vessel	0	9 „
Discharged at New Cut Wharf, Vessels under 60 tons reg.	0	8 „
Ditto ditto, from 60 tons and upwards	0	10 „
Discharged into Lighters	1	6 „
Loaded into any Vessel	0	6 „
Loaded into any Vessel, and discharged therefrom....	1	6 „

Towage.

In or Out, exclusive of Harbour Towages.

	£	s.	d.			£	s.	d.
Under 50 tons	0	7	6	425	and under	450	3	15 0
50 and under	75	0	10 0	450	„	475	4	0 0
75 „	100	0	12 6	475	„	500	4	5 0
100 „	125	0	15 0	500	„	525	4	10 0
125 „	150	0	17 6	525	„	550	4	15 0
150 „	175	1	0 0	550	„	575	5	0 0
175 „	200	1	5 0	575	„	600	5	5 0
200 „	225	1	10 0	600	„	650	5	10 0
225 „	250	1	15 0	650	„	700	5	15 0
250 „	275	2	0 0	700	„	750	6	0 0
275 „	300	2	5 0	750	„	800	6	5 0
300 „	325	2	10 0	800	„	850	6	10 0
325 „	350	2	15 0	850	„	900	6	15 0
350 „	375	3	0 0	900	„	950	7	0 0
375 „	400	3	5 0	950	„	1000	7	7 0
400 „	425	3	10 0					

All Vessels above 1000 tons, 2d. per ton, new measurement.

If more than one Tug is required, half the above rates will be charged for each additional Tug.

*Swansea, continued.***Pilotage.**

Register Tonnage.			Inwards.			Outwards.			Totals	
			£	s.	d.	£	s.	d.	£	s.
Vessels	50 tons and under	75	0	10	0	0	6	0	0	16
Vessels	75 tons and under	100	0	11	0	0	7	0	0	18
Vessels	100 tons and under	125	0	12	0	0	8	0	1	0
Vessels	125 tons and under	150	0	14	0	0	8	0	1	2
Vessels	150 tons and under	175	0	17	0	0	8	0	1	5
Vessels	175 tons and under	200	0	19	0	0	8	0	1	7
Vessels	200 tons and under	250	1	6	0	0	10	0	1	16
Vessels	250 tons and under	300	1	12	0	0	12	0	2	4
Vessels	300 tons and under	350	2	3	0	0	14	6	2	17
Vessels	350 tons and under	400	2	10	0	0	17	0	3	7
Vessels	400 tons and under	450	2	17	6	1	2	0	3	19
Vessels	450 tons and under	500	3	5	0	1	7	0	4	12
Vessels	500 tons and under	550	3	10	0	1	12	0	5	2
Vessels	550 tons and under	600	3	15	0	1	17	0	5	12
Vessels	600 tons and under	650	4	0	0	2	2	0	6	2
Vessels	650 tons and under	700	4	5	0	2	7	0	6	12
Vessels	700 tons and under	750	4	10	0	2	12	0	7	2
Vessels	750 tons and under	800	4	15	0	2	17	0	7	12
Vessels	800 tons and under	850	5	0	0	3	2	0	8	2
Vessels	850 tons and under	900	5	5	0	3	7	0	8	12
Vessels	900 tons and under	950	5	10	0	3	12	0	9	2
Vessels	950 tons and under	1000	5	15	0	3	17	0	9	12

together with an additional sum of 5s. in respect of every 50 tons above 950 tons, on the Inward Pilotage: and an additional sum of 5s. in respect of every 50 tons above 950 tons, on the Outward Pilotage.

Pilots will take Vessels over 500 tons register, Outward Bound clear of the Green Grounds, on to the Mumbles Roads; and the above charge includes landing the Pilot in all cases.

One half the above rates only to be paid and payable to every Pilot navigating or assisting any Vessel (not entering Swansea Harbour) within any part of Swansea Bay, or within the limits of the Pilotage Ground hereinafter mentioned.

Vessels of 200 tons and upwards, if boarded beyond the following bearings, shall pay additional Pilotage, as under:—

West of Oxwich Point, bearing N.N.E. South of Sker Buoy, ¹ bearing E.N.E. or W.S.W.				West of Worm's Head, bearing N.N.E.			
s. d.				£ s. d.			
Vessels 200 tons and under 300	....	5	0	....	0	6	0
Vessels 300 tons and under 400	....	7	6	....	0	10	0
Vessels 400 tons and under 500	....	10	0	....	0	15	0
Vessels 500 tons and under 600	....	12	6	....	1	0	0
Vessels 600 tons and under 700	....	15	0	....	1	5	0
Vessels 700 tons and upwards	....	18	6	....	1	10	0

Swansea, continued.

OPTIONAL PILOTAGE.—Masters of Vessels under 500 tons register requiring Pilots to take their Vessels to the Mumbles Roads, or clear of the Green Grounds, to pay, in addition to the Outward Pilotage Rates, the following additional rates, including landing :—

	s.	d.
Vessels under 100 tons	4	0
Vessels 100 tons and under 200	5	6
Vessels 200 tons and under 300	7	6
Vessels 300 tons and under 400	9	6
Vessels 400 tons and under 500	11	0

Masters of Vessels requiring Pilots to take their Vessels to the Eastern or Western Limits, to pay, in addition to the Outward Rates, the following additional rates, including landing ;—

	£	s.	d.
Vessels 300 tons and under 500	3	0	0
Vessels 500 tons and under 700	4	0	0
Vessels 700 tons and under 900	5	0	0
Vessels 900 tons and upwards	6	0	0

The following shall be deemed to be the limits of the Pilotage Ground of Pilots appointed and licensed by the Swansea Harbour Trustees, viz. :—"North of the line of the Nash Lights in one;" and "east of an imaginary line running north and south of a point, four miles westward of the Helwick Light Vessel, placed off the Helwick Shoal, near the Worm's Head, in the County of Glamorgan."

Every Pilot required to remain on board a Vessel, whether inward or outward bound, to be paid by the Master of such Vessel, at the rate of 4s. for every twelve hours, or broken portion of twelve hours, in which such Pilot shall not have earned pilotage or distance-money, in the same Vessel.

Harbour Pilotage.

	s.	d.
Vessels under 100 tons	2	6
Vessels 100 tons and under 200	3	6
Vessels 200 tons and under 400	5	0
Vessels 400 tons and under 500	7	6
Vessels 500 tons and upwards	12	0

If the Master of any Vessel shall require any Pilot to go on board and take his Vessel out of the Harbour, transport or move her, and such Vessel be not ready to be taken out or moved, half the rates last mentioned shall be paid to the Pilot.

Masters of Vessels requiring Hobblers or Boats, to assist in removing Vessels within the Harbour, shall pay each Hobbler employed, 2s., and for each Boat, 2s. 6d.

TENBY.**Tonnage Rates.**

Vessels discharging.....	3d. per ton register
Vessels wind bound.....	1½d. „
Yachts	2d. „ or 6d. per ton yearly
Trawlers	2d. „ or 40s. yearly

Pilot Boats exempt.

WATCHET.

Harbour Dues.—One halfpenny per ton registered tonnage.

VALUE IN BRITISH CURRENCY OF THE MONEYS OF ALL NATIONS.

AMERICA, U.S.

	£	s.	d.
Eagle	2	1	0
Half Eagle	1	0	6
Dollar	0	4	2

AUSTRIA.

Ducat.....	0	9	4
Silver Florin.....	0	2	0
Dollar.....	0	4	0
Zwanzigr, 20 Kreutzers ...	0	0	8

BELGIUM.

Gold Leopard	0	19	10
— 10 Franc Piece	0	7	10
Silver 5 Franc.....	0	3	11
— 1 Franc.....	0	0	9½

BREMEN.

Louis d'or	0	16	0
Gold Rigabank Dollar	0	3	4
36 Grosas Piece	0	1	6

BRAZILS.

Gold Piece, 6400 Reis	1	15	9
4000 —	1	0	0
Silver ditto, 1200 —	0	4	2
960 —	0	4	1
640 —	0	2	9
320 —	0	1	4
200 —	0	0	8

DENMARK.

	£	s.	d.
Christian d'or	0	16	3
Silver Species	0	4	4
Rigabank Daler	0	2	2
Mark	0	0	4½

EGYPT.

Gold New Sequin	0	10	4
Silver New Piastre.....	0	3	4
— Grush	0	1	2

EAST INDIES.

Gold Mohur	1	9	0
Sicca Rupee.....	0	1	10½

FRANCE.

Gold Napoleon	0	16	0
Silver 5-Franc Piece	0	4	0
— Franc	0	0	9½

GREECE

40-Drachmi Gold Piece ...	1	10	6
Five ditto	0	3	9
1 Drachmi, 100 Leplas	0	0	8½

GERMANY.

Gold Louis d'or	0	16	1
— Ducat	0	9	3
Silver Crown	0	4	4
Florin	0	1	8

HOLLAND.

	£	s.	d.
Gold 10-Florin Piece.....	0	16	6
— Ducat	0	9	3
Silver Florin or Guilder ...	0	1	8

HAMBURG and LUBEC.

Ducat.....	0	9	3
Dollar.....	0	4	4
Mark	0	1	2½

HANOVER, BRUNSWICK, &c.

Gold George d'or Double...	1	12	4
Ditto, Single	0	16	2
Thaler, 30 Groschen	0	2	11

MEXICO.

Gold Doubloon	3	5	0
— Half ditto	1	12	6
— Quarter ditto	0	16	3
— Sixteenth ditto.....	0	4	0
Silver Dollar	0	4	2
— Half ditto	0	2	1
— Quarter ditto	0	1	0½
— Eighth ditto	0	0	6½

NAPLES.

Gold Piece of 30 Ducats ...	5	0	0
Silver Ducat	0	3	4
— Dollar	0	4	0

NORWAY.

Spanish Dollar	0	4	4
Rigsbank Dollar	0	2	2
Mark	0	0	9½

POLAND.

Gold Ducat	0	9	0
Rix Dollar	0	4	0
Florin.....	0	0	5½

PORTUGAL.

Gold Joannose, 100 Reis.....	1	16	0
Silver Crown, 1600 Reis ...	0	4	8
— Crusado 400 Reis ...	0	2	3

PRUSSIA.

	£	s.	d.
Gold Frederick	0	16	9
Silver Thaler	0	3	0
Silbergroschen	0	0	1½

ROME.

Gold 10-Scudi Piece	2	2	6
Silver Scudo, 10 Paoli	0	4	2
Paoli, 10 Bajochi	0	0	5

RUSSIA.

Gold Half Imperial	0	16	3
Ducat.....	0	9	2
Silver Rouble	0	3	2

SAXONY.

August d'or	0	16	2
Thaler Specie	0	3	11
— Currency	0	3	0

SPAIN.

Gold Doubloon.....	3	6	6
— Pistole.....	0	16	6
Silver Dollar.....	0	4	3

SWEDEN.

Gold Ducat	0	9	2
Silver Species	0	4	4
— Half Species.....	0	2	2
Rix Dollar Banco, 48 Sk....	0	1	8

SWITZERLAND.

Gold Double Pistole	1	17	0
Four-Franc Piece	0	4	8
1-Franc do., 10 Batzen.....	0	1	1½

TURKEY.

Gold New Double Sequin...	1	16	0
— Sequin	0	18	0
Spanish Dollar.....	0	4	2
Piastre, 40 Paras.....	0	0	2½

TIDAL CONSTANTS.

By the following Table, the Time of High Water may be found in *Local Mean Time*, for any day of the year, by *adding to or subtracting from* the various Ports of reference.

GREAT BRITAIN.

West Coast, &c.			East Coast, &c.		
	H. M.			H. M.	
St. Ives sub.	1 48	From Pembroke Dock.	Inverness sub.	1 49	To or from London
Padstow sub.	1 19		Aberdeen sub.	1 7	
Boscastle sub.	1 17		Dundee add	0 25	
Budehaven sub.	0 58		Perth add	1 28	
Lundy Island .. sub.	1 17		Leith add	0 10	
Barnstaple Bridge add	0 41		Berwick add	0 11	
Appledore add	0 11		Blyth add	1 8	
Bideford add	0 20		Tynemouth Bar.. add	1 13	
Minehead sub.	1 12		North Shields .. add	1 16	
Bridgwater Bar .. sub.	0 52		Newcastle add	2 16	
Weston-super-Mare sub.	0 48	From Bristol	Sunderland add	1 15	To or from London
Flatholm Island .. sub.	0 48		Seaham add	1 17	
Portishead sub.	0 15		Hartlepool add	1 21	
Kingroad sub.	0 35		Whitby add	1 38	
Chepstow sub.	0 1		Scarborough .. add	2 4	
Cardiff sub.	0 22		Flamborough head add	2 23	
Tenby sub.	0 32		Great Grimsby .. add	3 29	
St Ann's lighthouse sub.	0 36		Hull add	4 19	
Fishguard add	0 24		Goole add	5 37	
Cardigan add	0 29		Lynn add	3 53	
Newquay add	0 58	To or from Pembroke Dock	Yarmouth Road.. sub.	4 52	To or from London
Aberystwith .. add	0 59		Lowestoft sub.	4 10	
Aberdovey add	1 28		Orfordness sub.	2 52	
Port Madoc add	0 58		Margate sub.	2 27	
Caernarvon sub.	2 2		Nore sub.	1 37	
Holyhead sub.	1 24		Chatham sub.	1 5	
Amlwch sub.	1 5		Gravesend sub.	0 57	
Beaumaris sub.	1 3		Woolwich sub.	0 30	
Chester sub.	1 5		London Docks .. sub.	0 10	
Fleetwood sub.	0 23				
Whitehaven sub.	0 21	To or from Liverpool	South Coast.		
Douglas, I. of Man sub.	0 23		Ramsgate add	5 12	To Pembroke Dock
Ramsey sub.	0 23		Deal add	4 43	
Peel sub.	0 27		Folkstone add	4 35	
Kircudbright .. sub.	0 25		Hastings add	4 21	
Ardrossan add	0 10		Beachy Head .. add	4 48	
Glasgow add	1 50		Shoreham add	5 2	

Tidal Constants, continued.

	H. M.		H. M.
Arundel Bar .. add	5 3	Lyme Regis .. sub.	0 11
Littlehampton .. add	5 4	Exmouth sub.	0 11
Chichester add	4 58	Torbay sub.	0 32
Bembridge Point . add	4 28	Teignmouth .. sub.	0 32
Portsmouth add	5 9	Dartmouth.. .. sub.	0 16
Southampton add	3 58	Devonport sub.	0 49
West Cowes add	4 13	Plymouth Break . sub.	0 55
Yarmouth add	3 28	Fowey.. .. sub.	1 18
Needles Point add	3 14	Mevagizey sub.	1 28
Christchurch add	2 28	Falmouth sub.	1 35
Poole add	2 38	Lizard sub.	1 32
Portland add	0 29	Penzance sub.	2 2
Bridport sub.	0 27	Scilly I. (St. Mary) sub.	2 6

To or from Pembroke Dock

From Pembroke Dock

IRELAND.

Skull sub.	2 30	Tor Point sub.	1 55
Crookhaven .. sub.	2 28	Lough Larne .. sub.	0 47
Dunmanus Harb. sub.	2 35	Belfast sub.	0 52
Dunbeacon.. .. sub.	2 41	Donaghadee .. sub.	0 22
Black Ball harbour sub.	2 52	Lough Strangford sub.	0 42
Castletown sub.	2 18	Warren Point .. sub.	0 25
Bantry Harbour.. sub.	2 45	Carlingford Bar.. sub.	0 55
West Cove sub.	2 40	Howth Harbour.. sub.	0 26
Valentia Harbour sub.	2 50	Dublin Bar sub.	0 23
Kilbaba sub.	2 16	Kingstown sub.	0 25
Kilrush sub.	1 50	Wicklow sub.	1 6
Carrigaholt .. sub.	1 48	Arklow sub.	2 50
Tarbert sub.	1 35	Wexford add	0 49
Foyne's Island .. sub.	0 57	New Ross sub.	0 28
Mellon sub.	0 31	Waterford (bridge) sub.	0 26
Limerick sub.	0 16	Do.(Duncan Fort) sub.	1 12
Galway sub.	1 57	Dunmore sub.	1 5
Roundstone .. sub.	2 4	Ballinacourty, Dun-	
Achillbeg sub.	1 18	garven sub.	1 20
Broadhaven Harb. sub.	1 32	Youghal sub.	1 18
Westport sub.	1 35	Ballycotton .. sub.	1 38
Sligo Bay sub.	1 14	Cork sub.	1 34
Donegal Harbour sub.	1 14	Queenstown .. sub.	1 31
Killibegs sub.	1 16	Kinsale sub.	1 49
Lough Rossmore. sub.	1 12	Courtmaeskerry.. sub.	1 56
Sheephaven .. sub.	1 0	Castletownsend .. sub.	2 11
Londonderry .. add	1 29	Baltimore sub.	2 9
Coleraine sub.	0 8	Cape Clear.. .. sub.	2 32

From Liverpool

To or from Pembroke Dock.

Tidal Constants, continued.

FOREIGN AND COLONIAL.

	H. M.		H. M.
Adelaide, port, Aus.	sub. 0 48	Ichabo	sub. 5 32
Aden, Arabia ..	add 3 13	Jackson, Port ..	add 1 43
Auckland	add 0 33	Jersey, St. Hellier	sub. 0 7
Bayonne Bar. Fr.	sub. 2 47	Malaga	add 5 28
Bilbao, Spain ..	sub. 3 32	Malo, St.	sub. 0 27
Bombay	add 5 8	Melbourne	sub. 5 12
Bordeaux	add 0 18	Moreton Bay ..	add 2 58
Boston, U.S. ..	add 4 55	Natal, Port.. ..	sub. 2 2
Botany Bay	add 1 43	Nelson, New Zea.	add 3 18
Boulogne	add 4 53	New York	add 1 41
Brest	sub. 2 45	Oporto	sub. 4 2
Buenos Ayres ..	add 5 28	Ostend	add 5 53
Cadiz, Spain ..	sub. 4 47	Pernambuco ..	sub. 2 9
Calais	add 5 17	Philadelphia ..	sub. 5 14
Calcutta	sub. 4 2	Philip, Port, entr.	sub. 5 2
Callao Bay.. ..	sub. 0 45	Portland, U.S. ..	add 4 53
Canton River, ent.	add 3 28	Quebec	add 0 6
Charlestown, U.S.	add 0 41	Richmond, U.S..	sub. 2 4
Cherbourg	add 1 17	Rio Janeiro ..	sub. 3 32
Copiapo	add 1 58	Rochelle	sub. 3 1
Coquimbo	add 2 36	Royal, Port ..	add 4 28
Delaware, U.S. ..	add 1 28	Rotterdam	sub. 2 47
Dieppe	add 4 34	Rouen	sub. 4 4
Francisco, San ..	add 4 2	Savannah, City ..	add 1 41
Galle, Point de ..	sub. 4 32	Senegal	add 3 58
Gambia River ..	add 1 38	Singapore	add 3 13
Geelong	sub. 3 42	Suez Bay	sub. 4 32
Gibraltar	sub. 4 12	Sydney, Australia	add 2 6
Guernsey, St. Peter	add 0 16	Table Bay	sub. 3 52
Hamburg	sub. 1 3	Tangier	sub. 4 50
Hong Kong	add 3 43	Ushant	sub. 3 0
Horn, Cape.. ..	sub. 2 22	Valparaiso	add 3 0

To or from Pembroke Dock.

To or from Pembroke Dock.

MOON'S RISING AND SETTING.

At four days old it sets at, and shines till, about 10 at night.	16 at a quarter after	7
5	17 at half after	8
6	18	10
7 at near 1 in the morning.	19	11
14 at full it rises about 6 in the evening.	20	12

THE
BRISTOL CHANNEL
ALMANACK
AND
TIDE TABLES ;
TOGETHER WITH
PORT CHARGES,
PILOTAGE REGULATIONS,
&c., &c.,
FOR THE YEAR
1864.

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TO THE PUBLIC.

THE Publishers of the Bristol Channel Tide Tables and Almanack, in presenting the third year's edition to the Public, beg to say that they have collected the particulars of Port Charges, &c., with as much care as circumstances would permit, but should any errors or omissions be discovered, they will be glad to have them pointed out, that they may be corrected in future years; and any suggestions for the improvement of the work will also be gladly received, as it is their desire to make it in every respect as accurate and complete as possible.

Swansea, Nov., 1863.

EXPLANATION.

THE TIDES in this work are calculated for **GREENWICH MEAN TIME**, and the Height for that Tide nearest mid-day at the following places:—

BARNSTAPLE.—The Bar.

BRIDGWATER.—The Bridge. The Time of high water at Bridgwater Bar is about 40 minutes earlier. The depth of water at Cumbwitch Pill is 7 to 8 feet more than in the Tables.

BRISTOL.—Cumberland Gates. The height at Bathurst Gates is 9 feet 2 inches less than in the Tables.

CARDIFF.—East Dock Sill. At the West Dock, the depth is 3 feet less than in the Tables.

GLOUCESTER.—Entrance to the Canal at Sharpness Point.

ILFRACOMBE.—Pier Head.

LLANELLY.—Dock Gates. At Burry Bar the depth of water is 8 feet more than in the Tables.

NEWPORT.—Dock Gates, which are about 40 feet above the bed of the river.

MILFORD HAVEN.—The heights are the rise above low water at spring tides. The time at St. Ann's Lighthouse, is about 25 minutes earlier.

SWANSEA.—Entrance Channel. The depth of water at New Cut Bridge, is about 3 feet, and at Hafod Works, 6 feet 6 inches less than in the Tables.

The times of high water for London and Liverpool, also the Moon's Transit and Equation of Time are added for the convenience of mariners.

PHASES OF THE MOON.

Last Quarter.. 2nd, 7h. 39m. a.m. | First Quarter. 15th, 11h. 6m. p.m.
 New Moon .. 9th, 7h. 45m. a.m. | Full Moon .. 23rd, 10h. 2m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgwater.				Bristol.			
		Morn.	Even.	Height		Morn.	Even.	Height		Morn.	Even.	Height	
		H. M.	H. M.	P. I.		H. M.	H. M.	P. I.		H. M.	H. M.	P. I.	
1	Friday ..	9 47	10 6	23 9		11 30	11 48	10 9		11 10	11 28	22 9	
2	Saturday..	10 26	10 47	22 10		..	0 8	9 7		11 48	..	21 1	
3	Sunday ..	11 15	11 44	22 1		0 33	1 3	8 8		0 13	0 43	19 9	
4	Monday ..	..	0 18	22 1		1 35	2 13	8 8		1 15	1 53	19 9	
5	Tuesday ..	0 59	2 41	22 9		2 50	3 30	9 6		2 30	3 10	20 11	
6	Wednesday	2 20	2 55	24 0		4 8	4 46	11 0		3 48	4 26	23 3	
7	Thursday ..	3 28	3 58	25 8		5 22	5 53	13 1		5 2	5 33	26 2	
8	Friday ..	4 28	4 57	27 3		6 24	6 53	15 1		6 4	6 33	29 2	
9	Saturday..	5 24	5 50	27 9		7 21	7 48	15 9		7 1	7 28	30 1	
10	Sunday ..	6 15	6 40	28 8		8 13	8 38	16 10		7 53	8 18	31 8	
11	Monday ..	7 1	7 26	29 0		9 0	9 23	17 3		8 40	9 3	32 4	
12	Tuesday ..	7 52	8 14	28 10		9 47	10 7	17 1		9 27	9 47	32 0	
13	Wednesday	8 36	8 57	28 1		10 27	10 46	16 2		10 7	10 26	30 8	
14	Thursday ..	9 17	9 37	26 10		11 3	11 20	14 7		10 43	11 0	28 4	
15	Friday ..	9 58	10 18	25 5		11 40	12 0	12 10		11 20	11 40	25 9	
16	Saturday ..	10 40	11 7	23 9		..	0 25	10 9		..	0 5	22 9	
17	Sunday ..	11 36	..	22 4		0 54	1 27	8 11		0 34	1 7	20 2	
18	Monday ..	0 11	0 54	21 11		2 7	2 45	8 5		1 47	2 25	19 4	
19	Tuesday ..	1 36	2 10	22 3		3 25	4 7	8 10		3 5	3 47	20 0	
20	Wednesday	2 55	3 28	23 1		4 46	5 22	9 11		4 26	5 2	21 7	
21	Thursday ..	3 58	4 23	24 2		5 53	6 20	11 3		5 33	6 0	23 5	
22	Friday ..	4 49	5 11	25 1		6 45	7 7	12 5		6 25	6 47	25 2	
23	Saturday..	5 32	5 49	25 6		7 28	7 47	12 11		7 8	7 27	25 11	
24	Sunday ..	6 5	6 23	26 1		8 4	8 21	13 8		7 44	8 1	27 0	
25	Monday ..	6 40	6 54	26 6		8 38	8 52	14 2		8 18	8 32	27 10	
26	Tuesday ..	7 10	7 25	26 8		9 8	9 22	14 4		8 48	9 2	28 1	
27	Wednesday	7 40	7 57	26 6		9 37	9 52	14 2		9 17	9 32	27 10	
28	Thursday ..	8 13	8 28	26 2		10 6	10 20	13 9		9 46	10 0	27 2	
29	Friday ..	8 45	8 59	25 7		10 34	10 47	13 0		10 14	10 27	26 0	
30	Saturday..	9 15	9 33	24 9		11 2	11 16	12 0		10 42	10 56	24 6	
31	Sunday ..	9 53	10 12	23 10		11 35	11 54	10 10		11 15	11 34	22 10	

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m — Bridgwater, *sub.* 12m. — Bristol, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter.. 2nd, 7h. 39m. a.m. | First Quarter. 15th, 11h. 6m. p.m.
 New Moon .. 9th, 7h. 45m. a.m. | Full Moon .. 23rd, 10h. 2m. p.m.

M. D.	WEEK DAYS.	Cardiff.					Gloucester.					Ilfracombe.				
		Morn.		Even		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H.	M.	H.	M.	F.	H.	M.	H.	M.	F.	H.	M.	H.	M.	F.
1	Friday ..	11	0	11	18	24	5	11	55	..	21	0	9	57	10	16
2	Saturday..	11	38	..	23	0	0	13	0	33	19	3	10	36	10	57
3	Sunday ..	0	3	0	33	21	10	0	58	1	23	17	9	11	25	11
4	Monday ..	1	5	1	42	21	10	2	0	2	38	17	9	..	0	28
5	Tuesday ..	2	20	3	0	22	10	3	15	3	55	19	1	1	9	2
6	Wednesday	3	38	4	16	24	10	4	33	5	11	21	6	2	30	3
7	Thursday ..	4	52	5	23	27	5	5	47	6	18	24	9	3	38	4
8	Friday ..	5	54	6	23	29	11	6	49	7	18	27	11	4	38	5
9	Saturday..	6	51	7	18	30	9	7	46	8	13	28	11	5	34	6
10	Sunday ..	7	43	8	8	32	0	8	38	9	3	30	7	6	25	6
11	Monday ..	8	30	8	53	32	7	9	25	9	48	31	3	7	11	8
12	Tuesday ..	9	17	9	37	32	4	10	12	10	32	30	11	8	2	8
13	Wednesday	9	57	10	16	31	3	10	52	11	12	29	7	8	46	9
14	Thursday ..	10	33	10	50	29	3	11	28	11	45	27	1	9	27	9
15	Friday ..	11	10	11	30	27	0	..	0	5	24	3	10	8	10	28
16	Saturday..	11	55	..	24	5	0	0	25	0	50	21	0	10	50	11
17	Sunday ..	0	24	0	57	22	3	1	19	1	52	18	4	11	46	..
18	Monday ..	1	37	2	15	21	6	2	32	3	10	17	5	0	21	1
19	Tuesday ..	2	55	3	37	22	1	3	50	4	32	18	2	1	46	2
20	Wednesday	4	16	4	52	23	5	5	11	5	47	19	9	3	5	3
21	Thursday ..	5	23	5	50	25	0	6	18	6	45	21	9	4	8	4
22	Friday ..	6	15	6	37	26	6	7	10	7	32	23	7	4	59	5
23	Saturday..	6	58	7	17	27	2	7	53	8	12	24	5	5	42	5
24	Sunday ..	7	34	7	51	28	1	8	29	8	46	25	7	6	15	6
25	Monday ..	8	8	8	22	28	9	9	3	9	17	26	5	6	50	7
26	Tuesday ..	8	38	8	52	29	0	9	33	9	47	26	9	7	20	7
27	Wednesday	9	7	9	22	28	9	10	2	10	17	26	5	7	50	8
28	Thursday ..	9	36	9	50	28	3	10	31	10	45	25	9	8	23	8
29	Friday ..	10	4	10	17	27	3	10	59	11	12	24	7	8	55	9
30	Saturday..	10	32	10	46	26	0	11	27	11	41	23	0	9	25	9
31	Sunday ..	11	5	11	24	24	6	12	0	..	21	2	10	3	10	22

The above are in Greenwich Mean Time, if local Time be required for
 Cardiff, *sub* 13m.—Gloucester, *sub*. 10m.—Ilfracombe, *sub*. 16m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter. 2nd, 7h. 39m. a.m. | First Quarter. 15th, 11h. 6m. p.m.
 New Moon .. 9th, 7h. 45m. a.m. | Full Moon .. 23rd, 10h. 2m. p.m.

M. D.	WEEK DAYS.	Llanelly.				Milford Haven.				Newport.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	10	32	10	51	17	9	10	32	10	51	17	3
2	Saturday..	11	11	11	32	16	8	11	11	11	32	16	4
3	Sunday ..	11	59	..	..	15	11	11	59	..	..	15	7
4	Monday..	0	29	1	3	15	11	0	29	1	3	15	7
5	Tuesday..	1	44	2	26	16	7	1	44	2	26	16	3
6	Wednesdy	3	5	3	40	18	0	3	5	3	40	17	6
7	Thursday.	4	13	4	43	19	9	4	13	4	43	19	2
8	Friday ..	5	13	5	42	21	6	5	13	5	42	20	9
9	Saturday..	6	9	6	35	22	1	6	9	6	35	21	3
10	Sunday ..	7	0	7	25	23	1	7	0	7	25	22	2
11	Monday..	7	47	8	11	23	5	7	47	8	11	22	6
12	Tuesday..	8	37	8	59	23	3	8	37	8	59	22	4
13	Wednesdy	9	21	9	42	22	5	9	21	9	42	21	7
14	Thursday.	10	2	10	22	21	1	10	2	10	22	20	4
15	Friday ..	10	43	11	3	19	6	10	43	11	3	18	11
16	Saturday .	11	25	11	52	17	9	11	25	11	52	17	3
17	Sunday ..	..	..	0	21	16	2	..	..	0	21	15	10
18	Monday..	0	56	1	39	15	8	0	56	1	39	15	5
19	Tuesday..	2	21	3	4	16	1	2	21	3	4	15	9
20	Wednesdy	3	40	4	13	17	0	3	40	4	13	16	7
21	Thursday.	4	43	5	8	18	2	4	43	5	8	17	8
22	Friday ..	5	34	5	56	19	2	5	34	5	56	18	7
23	Saturday..	6	17	6	34	19	7	6	17	6	34	19	0
24	Sunday ..	6	50	7	8	20	3	6	50	7	8	19	7
25	Monday..	7	25	7	39	20	8	7	25	7	39	20	0
26	Tuesday..	7	55	8	10	20	10	7	55	8	10	20	2
27	Wednesdy	8	25	8	42	20	8	8	25	8	42	20	0
28	Thursday	8	58	9	13	20	4	8	58	9	13	19	8
29	Friday ..	9	30	9	44	19	8	9	30	9	44	19	1
30	Saturday..	10	0	10	18	18	10	10	0	10	18	18	3
31	Sunday ..	10	38	10	57	17	10	10	38	10	57	17	4

The above are in Greenwich Mean Time, if local Time be required for
 Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.—Newport, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter.. 2nd, 7h. 39m. a.m. | First Quarter. 15th, 11h. 6m. p.m.
 New Moon .. 9th, 7h. 45m. a.m. | Full Moon .. 23rd, 10h. 2m. p.m.

WEEK DAYS.	Swansea.						Liverpool.				London.				Equation of Time.	Moon's Tran- sit.	
	Morn.		Even.		Height		Morn.		Even.		Morn.		Even.				
	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.	H.	M.			
Friday..	10	22	10	41	17	3	3	18	3	37	6	15	6	34	3	38	5m 4
Satur..	11	1	11	22	16	1	3	59	4	23	6	54	7	16	4	6	5 47
Sunday	11	49	..	..	15	2	4	52	5	26	7	40	8	8	4	34	6 33
Mon ..	0	19	0	53	15	2	6	2	6	43	8	42	9	17	5	1	7 22
Tues ..	1	34	2	16	16	0	7	21	7	58	9	53	10	30	5	29	8 15
Wednes	2	55	3	30	17	6	8	31	9	2	11	9	11	44	5	56	9 11
Thurs..	4	3	4	33	19	7	9	30	9	54	..	0	15	6	22	10 12	
Friday..	5	3	5	32	21	7	10	20	10	45	0	44	1	10	6	48	11 14
Satur..	5	59	6	25	22	3	11	10	11	35	1	37	2	2	7	13	0a15
Sunday	6	50	7	15	23	4	12	0	..	..	2	26	2	51	7	38	1 15
Mon ..	7	37	8	1	23	9	0	26	0	49	3	15	3	39	8	3	2 12
Tues ..	8	27	8	49	23	7	1	13	1	38	4	1	4	25	8	26	3 7
Wednes	9	11	9	32	22	8	1	59	2	21	4	50	5	12	8	49	3 59
Thurs..	9	52	10	12	21	1	2	43	3	4	5	34	5	57	9	12	4 49
Friday..	10	33	10	53	19	4	3	26	3	49	6	19	6	42	9	34	5 39
Satur..	11	15	11	42	17	3	4	13	4	42	7	6	7	30	9	55	6 29
Sunday	..	..	0	11	15	5	5	16	5	52	7	59	8	32	10	15	7 19
Mon ..	0	46	1	29	14	11	6	35	7	16	9	9	9	46	10	35	8 10
Tues ..	2	11	2	54	15	4	7	53	8	30	10	25	11	4	10	54	9 0
Wednes	3	30	4	3	16	5	9	2	9	30	11	43	..	..	11	12	9 50
Thurs..	4	33	4	58	17	9	9	54	10	16	0	15	0	44	11	29	10 38
Friday..	5	24	5	46	18	11	10	37	10	58	1	10	1	33	11	46	11 26
Satur..	6	7	6	24	19	5	11	17	11	34	1	55	2	14	12	2	morn.
Sunday	6	40	6	58	20	2	11	51	..	..	2	33	2	50	12	17	0 11
Mon ..	7	15	7	29	20	8	0	9	0	26	3	6	3	23	12	31	0 55
Tues ..	7	45	8	0	20	10	0	40	0	57	3	39	3	53	12	45	1 38
Wednes	8	15	8	32	20	8	1	12	1	27	4	9	4	24	12	57	2 20
Thurs ..	8	48	9	3	20	3	1	43	1	58	4	39	4	55	13	9	3 2
Friday..	9	20	9	34	19	6	2	13	2	30	5	11	5	26	13	20	3 44
Satur..	9	50	10	8	18	6	2	45	3	3	5	43	5	59	13	31	4 28
Sunday	10	28	10	47	17	4	3	21	3	43	6	18	6	37	13	40	5 15

Subtract from Mean Time. Add to Apparent Time.

The above are in Greenwich Time, if local Mean Time be required for
 Swansea, *sub.* 15 m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter.. 1st, 12h. 17m. a.m. | First Quarter. 14th, 1h. 24m. p.m.
 New Moon .. 7th, 6h. 9m. p.m. | Full Moon .. 22nd, 5h. 0m. p.m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgwater.					Bristol.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H. M.	H. M. F.	H. M. F.	H. M. F.	I.	H. M.	H. M. F.	H. M. F.	H. M. F.	I.	H. M.	H. M. F.	H. M. F.	H. M. F.	I.
1	Monday..	10 33	10 57	22	9	0	..	0 17	9	6	11 57	..	..	20	11	11
2	Tuesday..	11 31	..	22	0	0	0 45	1 20	8	6	0 25	1	0	19	6	6
3	Wednesday	0 10	0 56	22	3	2	2 4	2 47	8	10	1 44	2	27	20	0	0
4	Thursday..	1 42	2 26	23	5	3	3 30	4 14	10	4	3 10	3	54	22	2	2
5	Friday ..	3 6	3 41	25	3	4	4 58	5 37	12	7	4 38	5	16	25	6	6
6	Saturday..	4 11	4 42	27	1	6	6 7	6 38	14	11	5 47	6	18	28	10	10
7	Sunday ..	5 10	5 37	27	9	7	7 6	7 34	15	9	6 46	7	14	30	1	1
8	Monday..	5 59	6 23	28	11	7	7 58	8 20	17	2	7 38	8	0	32	2	2
9	Tuesday..	6 45	7 8	29	6	8	8 43	9 6	17	11	8 23	8	46	33	2	2
10	Wednesday	7 29	7 51	29	4	9	9 26	9 46	17	8	9 6	9	26	32	11	11
11	Thursday..	8 11	8 32	28	7	10	10 5	10 23	16	9	9 45	10	3	31	6	6
12	Friday ..	8 52	9 9	27	4	10	10 41	10 57	15	2	10 21	10	37	29	4	4
13	Saturday..	9 29	9 51	25	8	11	11 13	11 33	13	1	10 53	11	13	26	2	2
14	Sunday ..	10 12	10 33	24	0	11	11 54	..	11	0	11 34	11	58	23	3	3
15	Monday..	10 59	11 31	22	5	0	0 18	0 46	9	1	..	0	26	20	4	4
16	Tuesday..	..	0 8	21	6	1	1 20	2 2	7	10	1 0	1	42	18	7	7
17	Wednesday	0 55	0 41	21	6	2	2 46	3 29	7	10	2 26	3	9	18	7	7
18	Thursday..	2 24	3 4	22	3	4	4 12	4 56	8	10	3 52	4	36	20	6	6
19	Friday ..	3 36	4 1	23	6	5	5 31	5 57	10	5	5 11	5	37	22	3	3
20	Saturday..	4 26	4 48	24	8	6	6 22	6 44	11	10	6 2	6	24	24	4	4
21	Sunday ..	5 8	5 26	25	2	7	7 4	7 23	12	6	6 44	7	3	25	4	4
22	Monday..	5 43	5 57	26	0	7	7 40	7 56	13	6	7 20	7	36	26	10	10
23	Tuesday..	6 13	6 28	26	8	8	8 12	8 27	14	4	7 52	8	7	28	1	1
24	Wednesday	6 45	7 0	27	0	8	8 43	8 57	14	9	8 23	8	37	28	8	8
25	Thursday..	7 13	7 29	27	1	9	9 11	9 26	14	11	8 51	9	6	28	10	10
26	Friday ..	7 45	8 0	26	9	9	9 40	9 55	14	6	9 20	9	35	28	2	2
27	Saturday..	8 17	8 34	26	2	10	10 10	10 25	13	9	9 50	10	5	27	2	2
28	Sunday ..	8 51	9 8	25	5	10	10 40	10 57	12	10	10 20	10	37	25	9	9
29	Monday..	9 26	9 47	24	4	11	11 11	11 30	11	5	10 51	11	10	23	9	9

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter.. 1st, 12h. 17m. a.m. | First Quarter. 14th, 1h. 24m. p.m.
 New Moon .. 7th, 6h. 9m. p.m. | Full Moon .. 22nd, 5h. 0m. p.m.

M. D.	WEEK DAYS.	Cardiff.				Gloucester.				Ilfracombe.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Monday..	11	47	..	..	22	10	0	19	0	42	19	1
2	Tuesday..	0	15	0	51	21	8	1	10	1	45	17	7
3	Wednesday	1	34	2	17	22	1	2	29	3	12	18	2
4	Thursday..	3	0	3	44	23	11	3	55	4	39	20	5
5	Friday ..	4	28	5	6	26	9	5	23	6	2	23	11
6	Saturday..	5	37	6	8	29	8	6	32	7	3	27	7
7	Sunday ..	6	36	7	4	30	9	7	31	7	59	28	11
8	Monday..	7	28	7	51	32	6	8	23	8	45	31	1
9	Tuesday..	8	13	8	36	33	5	9	8	9	31	32	3
10	Wednesday	8	56	9	16	33	2	9	51	10	11	31	11
11	Thursday..	9	35	9	53	31	11	10	30	10	48	30	5
12	Friday ..	10	11	10	27	30	0	11	6	11	22	28	1
13	Saturday..	10	43	11	3	27	5	11	38	11	58	24	9
14	Sunday ..	11	24	11	48	24	10	..	0	19	21	6	10
15	Monday..	..	..	0	16	22	4	0	43	1	11	18	5
16	Tuesday..	0	51	1	32	20	10	1	45	2	27	16	7
17	Wednesday	2	16	2	59	20	10	3	11	3	54	16	7
18	Thursday..	3	42	4	26	22	1	4	37	5	21	18	2
19	Friday ..	5	1	5	27	24	0	5	56	6	22	20	6
20	Saturday..	5	52	6	14	25	10	6	47	7	9	22	9
21	Sunday ..	6	34	6	53	26	7	7	29	7	48	23	9
22	Monday..	7	10	7	26	28	0	8	5	8	21	25	5
23	Tuesday..	7	42	7	57	29	0	8	37	8	52	26	9
24	Wednesday	8	13	8	27	29	6	9	8	9	22	27	5
25	Thursday..	8	41	8	56	29	8	9	36	9	51	27	7
26	Friday ..	9	10	9	25	29	1	10	5	10	20	26	11
27	Saturday..	9	40	9	55	28	3	10	35	10	50	25	9
28	Sunday ..	10	10	10	27	27	0	11	5	11	22	24	3
29	Monday..	10	41	11	0	25	3	11	36	11	55	22	1

The above are in Greenwich Mean Time, if local Time be required for
 Cardiff, *sub* 13m.—Gloucester, *sub* 10m.—Ilfracombe, *sub* 16m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter.. 1st, 12h. 17m. a.m. | First Quarter. 14th, 1h. 24m. p.m.
 New Moon .. 7th, 6h. 9m. p.m. | Full Moon .. 22nd, 5h. 0m. p.m.

M. D.	WEEK DAYS.	Llanelly.					Milford Haven.					Newport.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H.	M.	H.	M.	P.	H.	M.	H.	M.	P.	H.	M.	H.	M.	P.
1	Monday..	11	18	11	42	16	7	11	18	11	42	16	3	11	57	..
2	Tuesday..	..	..	0	16	15	9	..	..	0	16	15	6	0	25	1
3	Wednesday	0	55	1	41	16	1	0	55	1	41	15	9	1	44	2
4	Thursday..	2	27	3	11	17	4	2	27	3	11	16	11	3	10	3
5	Friday ..	3	51	4	26	19	4	3	51	4	26	18	9	4	38	5
6	Saturday..	4	56	5	27	21	4	4	56	5	27	20	7	5	47	6
7	Sunday ..	5	55	6	22	22	1	5	55	6	22	21	3	6	46	7
8	Monday..	6	44	7	8	23	4	6	44	7	8	22	5	7	38	8
9	Tuesday..	7	30	7	53	24	0	7	30	7	53	23	0	8	23	8
10	Wednesday	8	14	8	36	23	9	8	14	8	36	22	10	9	6	9
11	Thursday..	8	56	9	17	23	0	8	56	9	17	22	1	9	45	10
12	Friday ..	9	37	9	54	21	7	9	37	9	54	20	10	10	21	10
13	Saturday..	10	14	10	36	19	9	10	14	10	36	19	2	10	53	11
14	Sunday ..	10	57	11	18	18	0	10	57	11	18	17	6	11	34	11
15	Monday..	11	44	..	..	16	3	11	44	..	..	15	11	..	0	12
16	Tuesday..	0	16	0	53	15	2	0	16	0	53	15	0	1	0	1
17	Wednesday	1	40	2	26	15	2	1	40	2	26	15	0	2	26	3
18	Thursday..	3	9	3	49	16	1	3	9	3	49	15	9	3	52	4
19	Friday ..	4	21	4	46	17	5	4	21	4	46	17	0	5	11	5
20	Saturday..	5	11	5	33	18	8	5	11	5	33	18	2	6	2	6
21	Sunday ..	5	53	6	11	19	3	5	53	6	11	18	8	6	44	7
22	Monday..	6	28	6	42	20	2	6	28	6	42	19	6	7	20	7
23	Tuesday..	6	58	7	13	20	10	6	58	7	13	20	2	7	52	8
24	Wednesday	7	30	7	44	21	3	7	30	7	44	20	6	8	23	8
25	Thursday..	7	58	8	14	21	4	7	58	8	14	20	7	8	51	9
26	Friday ..	8	30	8	46	21	0	8	30	8	46	20	3	9	20	9
27	Saturday..	9	2	9	19	20	4	9	2	9	19	19	8	9	50	10
28	Sunday ..	9	36	9	53	19	6	9	36	9	53	18	11	10	20	10
29	Monday..	10	11	10	32	18	4	10	11	10	32	17	10	10	51	11

The above are in Greenwich Mean Time, if local Time be required for
 Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.—Newport, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter.. 1st, 12h. 17m. a.m. | First Quarter. 14th, 1h. 24m. p.m.
 New Moon .. 7th, 6h. 9m. p.m. | Full Moon .. 22nd, 5h. 0m. p.m.

WEEK M. DAYS.	Swansea.						Liverpool.				London.				Equation of Time.	Moon's Trans- sit.		
	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.						
	H.	M.	H.	M.		F.	I.	H.	M.	H.	M.	H.	M.	H.			M.	
1 Mon ..	11	8	11	32	16	0	4	6	4	33	7	0	7	23	13	49	6	4
2 Tues ..	..	..	0	6	15	0	5	5	5	46	7	50	8	21	13	59	6	57
3 Wednes	0	45	1	31	15	4	6	34	7	18	9	3	9	45	14	4	7	54
4 Thurs..	2	17	3	1	16	10	7	58	8	36	10	27	11	9	14	10	8	53
5 Friday..	3	41	4	16	19	1	9	11	9	40	11	49	..	..	14	15	9	54
6 Satur..	4	46	5	17	21	5	10	6	10	31	0	25	0	55	14	20	10	54
7 Sunday	5	45	6	12	22	3	10	56	11	22	1	22	1	49	14	24	11	52
8 Mon ..	6	34	6	58	23	8	11	45	..	..	2	13	2	38	14	27	0a50	
9 Tues ..	7	20	7	43	24	5	0	9	0	31	3	0	3	23	14	29	1	45
10 Wednes	8	4	8	26	24	2	0	55	1	16	3	44	4	7	14	31	2	38
11 Thurs..	8	46	9	7	23	3	1	37	1	56	4	28	4	49	14	32	3	31
12 Friday..	9	27	9	44	21	8	2	17	2	37	5	9	5	30	14	32	4	23
13 Satur..	10	4	10	26	19	7	2	56	3	17	5	51	6	11	14	31	5	14
14 Sunday	10	47	11	8	17	6	3	41	4	6	6	33	6	58	14	29	6	6
15 Mon ..	11	34	..	..	15	7	4	34	5	7	7	23	7	51	14	26	6	56
16 Tues ..	0	6	0	43	14	4	5	46	6	32	8	23	9	3	14	23	7	57
17 Wednes	1	30	2	16	14	4	7	17	7	57	9	43	10	26	14	19	8	35
18 Thurs..	2	59	3	39	15	4	8	34	9	9	11	8	11	47	14	14	9	23
19 Friday..	4	11	4	36	16	11	9	36	9	57	..	0	23	..	14	9	10	9
20 Satur..	5	1	5	23	18	4	10	18	10	36	0	51	1	13	14	3	19	53
21 Sunday	5	43	6	1	19	0	10	54	11	12	1	35	1	54	13	56	11	33
22 Mon ..	6	18	6	32	20	0	11	28	11	43	2	11	2	28	13	49	morn.	
23 Tues ..	6	48	7	3	20	10	11	59	..	..	2	44	2	58	13	41	0	19
24 Wednes	7	20	7	34	21	3	0	15	0	31	3	14	3	29	13	32	1	1
25 Thurs ..	7	48	8	4	21	5	0	45	1	0	3	44	3	58	13	23	1	43
26 Friday..	8	20	8	36	21	0	1	16	1	31	4	12	4	28	13	13	2	27
27 Satur..	8	52	9	9	20	3	1	47	2	2	4	43	4	59	13	3	3	13
28 Sunday	9	26	9	43	19	4	2	19	2	36	5	15	5	32	12	52	4	0
29 Mon ..	10	1	10	22	17	11	2	54	3	14	5	50	6	9	12	40	4	51

Subtract from Mean Time. — Add to Apparent Time.

The above are in Greenwich Time, if local Mean Time be required for
 Swansea, *sub.* 15 m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter. 1st, 1h. 11m. p.m. | Full Moon .. 23rd, 10h. 24m. a.m.
 New Moon .. 8th, 3h. 59m. a.m. | Last Quarter. 30th, 10h. 19m. p.m.
 First Quarter. 15th, 5h. 7m. a.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgwater.				Bristol.			
		Morn.	Even.	Height		Morn.	Even.	Height		Morn.	Even.	Height	
		H. M.	H. M.	P. I.		H. M.	H. M.	P. I.		H. M.	H. M.	P. I.	
1	Tuesday..	10 9	10 35	23 4		11 51	..	10 2		11 31	11 58	22 0	
2	Wednesday	11 3	11 40	22 3		0 18	0 51	8 10		..	0 31	20 0	
3	Thursday	..	0 27	22 3		1 31	2 20	8 10		1 11	2 0	20 0	
4	Friday ..	1 17	2 5	23 4		3 6	3 52	10 2		2 46	3 32	22 0	
5	Saturday..	2 46	3 21	25 2		4 36	5 14	12 6		4 16	4 54	25 4	
6	Sunday ..	3 52	4 20	27 1		5 47	6 16	14 11		5 27	5 56	28 10	
7	Monday..	4 48	5 15	28 5		6 44	7 11	16 7		6 24	6 51	31 2	
8	Tuesday..	5 38	6 0	28 11		7 35	7 58	17 2		7 15	7 38	32 2	
9	Wednesday	6 22	6 45	29 4		8 20	8 43	17 8		8 0	8 23	32 11	
10	Thursday.	7 6	7 26	29 2		9 4	9 23	17 6		8 44	9 3	32 8	
11	Friday ..	7 47	8 6	28 5		9 42	10 0	16 7		9 22	9 40	31 2	
12	Saturday .	8 27	8 46	27 2		10 19	10 35	15 0		9 59	10 15	29 0	
13	Sunday ..	9 6	9 25	25 7		10 54	11 9	13 0		10 34	10 49	26 0	
14	Monday..	9 46	10 7	23 11		11 29	11 50	10 11		11 9	11 30	23 0	
15	Tuesday..	10 31	10 58	22 4		..	0 14	8 11		11 54	..	20 2	
16	Wednesday	11 31	..	21 3		0 46	1 20	7 6		0 26	1 0	18 2	
17	Thursday.	0 10	0 56	21 2		2 4	2 47	7 5		1 44	2 27	18 1	
18	Friday ..	1 42	2 23	21 10		3 30	4 11	8 4		3 10	3 51	19 2	
19	Saturday..	2 58	3 25	23 0		4 49	5 20	9 9		4 29	5 0	21 5	
20	Sunday ..	3 51	4 12	24 4		5 45	6 8	11 5		5 25	5 48	23 9	
21	Monday..	4 33	4 52	25 5		6 30	6 49	12 10		6 10	6 29	25 9	
22	Tuesday..	5 10	5 26	25 10		7 6	7 23	13 4		6 46	7 3	26 6	
23	Wednesday	5 42	5 58	26 8		7 39	7 57	14 4		7 19	7 37	28 1	
24	Thursday.	6 12	6 31	27 1		8 11	8 30	14 11		7 51	8 10	28 10	
25	Friday ..	6 46	7 2	27 3		8 44	9 0	15 1		8 24	8 40	29 2	
26	Saturday..	7 19	7 36	27 0		9 17	9 33	14 9		8 57	9 13	28 8	
27	Sunday ..	7 55	8 12	26 6		9 50	10 5	14 2		9 30	9 45	27 10	
28	Monday..	8 32	8 50	25 9		10 23	10 39	13 3		10 3	10 19	26 4	
29	Tuesday..	9 10	9 38	24 8		10 58	11 17	11 10		10 38	10 57	24 4	
30	Wednesday	9 57	10 24	23 8		11 39	..	10 7		11 19	11 46	22 7	
31	Thursday.	10 53	11 30	22 7		0 6	0 39	9 3		..	0 19	20 7	

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter. 1st, 1h. 11m. p.m. Full Moon .. 23rd, 10h. 24m. a.m.
 New Moon .. 8th, 3h. 59m. a.m. Last Quarter. 30th, 10h. 19m. p.m.
 First Quarter. 15th, 6h. 7m. a.m.

M. D.	WEEK DAYS.	Cardiff.				Gloucester.				Ilfracombe.			
		Morn.	Even.	Height		Morn.	Even.	Height		Morn.	Even.	Height	
		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.	
1	Tuesday..	11 21	11 48	23 9		..	0 16	23 0		10 19	10 45	16 9	
2	Wednesday..	..	0 21	22 1		0 43	1 16	18 2		11 13	11 50	15 7	
3	Thursday..	1 1	1 50	22 1		1 56	2 45	18 2		..	0 37	15 7	
4	Friday ..	2 36	3 22	23 9		3 31	4 17	23 0		1 27	2 15	16 9	
5	Saturday..	4 6	4 44	26 7		5 1	5 39	23 9		2 56	3 31	18 9	
6	Sunday ..	5 17	5 46	29 8		6 12	6 41	27 7		4 2	4 30	20 10	
7	Monday..	6 14	6 41	31 8		7 9	7 36	30 1		4 58	5 25	22 4	
8	Tuesday..	7 5	7 28	32 6		8 0	8 23	31 1		5 48	6 9	22 10	
9	Wednesday	7 50	8 13	33 2		8 45	9 8	31 11		6 32	6 55	23 3	
10	Thursday..	8 34	8 53	32 11		9 29	9 48	31 7		7 16	7 36	23 1	
11	Friday ..	9 12	9 30	31 8		10 7	10 25	30 1		7 57	8 16	22 4	
12	Saturday..	9 49	10 5	29 9		10 44	11 0	27 9		8 37	8 56	20 11	
13	Sunday ..	10 24	10 39	27 3		11 19	11 34	24 7		9 16	9 35	19 2	
14	Monday..	10 59	11 20	24 8		11 54	..	21 4		9 56	10 17	17 5	
15	Tuesday..	11 44	..	22 3		0 15	0 39	18 4		10 41	11 8	15 8	
16	Wednesday	0 16	0 51	20 6		1 11	1 45	16 1		11 41	..	14 5	
17	Thursday..	1 34	2 17	20 5		2 29	3 12	16 0		0 20	1 6	14 4	
18	Friday ..	3 0	3 41	21 5		3 55	4 36	17 3		1 52	2 38	15 1	
19	Saturday..	4 19	4 49	23 3		5 14	5 45	19 7		3 8	3 35	16 4	
20	Sunday ..	5 15	5 38	25 3		6 10	6 33	22 1		4 1	4 22	17 10	
21	Monday..	6 0	6 19	27 0		6 55	7 14	24 3		4 43	5 2	19 0	
22	Tuesday..	6 36	6 53	27 8		7 31	7 48	25 1		5 20	5 36	19 6	
23	Wednesday	7 9	7 27	29 0		8 4	8 22	26 9		5 52	6 8	20 4	
24	Thursday..	7 41	8 0	29 8		8 36	8 55	27 2		6 22	6 41	20 10	
25	Friday ..	8 14	8 30	29 11		9 9	9 25	27 11		6 56	7 12	21 0	
26	Saturday..	8 47	9 3	29 6		9 42	9 58	27 5		7 29	7 45	20 9	
27	Sunday ..	9 20	9 35	28 9		10 15	10 30	26 5		8 5	8 22	20 2	
28	Monday..	9 53	10 9	27 6		10 48	11 4	24 11		8 42	9 0	19 5	
29	Tuesday..	10 28	10 47	25 10		11 23	11 42	22 9		9 20	9 43	18 2	
30	Wednesday	11 9	11 36	24 3		..	0 4	20 10		10 7	10 34	17 1	
31	Thursday..	..	0 9	22 7		0 31	1 4	18 9		11 3	11 40	15 11	

The above are in Greenwich Mean Time, if local Time be required for
 Cardiff, *sub.* 13m. —Glo'ster, *sub.* 10m.—Ilfracombe, *sub.* 16m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter.. 1st, 1h. 11m. p.m. | Full Moon .. 23rd, 10h. 24m.
 New Moon .. 8th, 3h. 59m. a.m. | Last Quarter. 30th, 10h 19m.
 First Quarter. 15th, 6h. 7m. a.m. |

M. D.	WEEK DAYS.	Llanelly.				Milford Haven.				Newport.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Tuesday..	10	54	11	20	17	3	10	54	11	20	16	10
2	Wednesday	11	48	..	..	16	1	11	48	..	..	15	9
3	Thursday..	0	25	1	12	16	1	0	25	1	12	15	9
4	Friday ..	2	2	2	50	17	3	2	2	2	50	16	10
5	Saturday..	3	31	4	6	19	3	3	31	4	6	18	8
6	Sunday ..	4	37	5	5	21	4	4	37	5	5	20	7
7	Monday..	5	33	6	0	22	10	5	33	6	0	21	11
8	Tuesday..	6	23	6	44	23	4	6	23	6	44	22	5
9	Wednesday	7	7	7	30	23	9	7	7	7	30	22	10
10	Thursday..	7	51	8	11	23	7	7	51	8	11	22	8
11	Friday ..	8	32	8	51	22	10	8	32	8	51	21	11
12	Saturday..	9	12	9	31	21	5	9	12	9	31	20	8
13	Sunday ..	9	51	10	10	19	8	9	51	10	10	19	1
14	Monday..	10	31	10	52	17	11	10	31	10	52	17	5
15	Tuesday..	11	16	11	43	16	2	11	16	11	43	15	10
16	Wednesday	..	..	0	16	14	11	..	..	0	16	14	9
17	Thursday..	0	55	1	41	14	10	0	55	1	41	14	8
18	Friday ..	2	27	3	8	15	7	2	27	3	8	15	4
19	Saturday..	3	43	4	10	16	10	3	43	4	10	16	6
20	Sunday ..	4	36	4	57	18	4	4	36	4	57	17	10
21	Monday..	5	18	5	37	19	6	5	18	5	37	18	11
22	Tuesday..	5	55	6	11	20	0	5	55	6	11	19	4
23	Wednesday	6	27	6	43	20	10	6	27	6	43	20	2
24	Thursday..	6	57	7	16	21	4	6	57	7	16	20	7
25	Friday ..	7	31	7	47	21	6	7	31	7	47	20	9
26	Saturday..	8	4	8	20	21	3	8	4	8	20	20	6
27	Sunday ..	8	40	8	57	20	8	8	40	8	57	20	0
28	Monday..	9	17	9	35	19	11	9	17	9	35	19	3
29	Tuesday..	9	55	10	18	18	8	9	55	10	18	18	2
30	Wednesday	10	42	11	9	17	7	10	42	11	9	17	2
31	Thursday	11	38	..	..	16	5	11	38	..	..	16	1

The above are in Greenwich Mean Time, if local Time be required for
 Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.—Newport, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

Last Quarter.. 1st, 1h. 11m. p.m. (Full Moon .. 23rd, 10h. 24m. a.m.
 New Moon .. 8th, 3h. 59m. a.m. | Last Quarter. 30th, 10h. 19m. p.m.
 First Quarter. 15th, 6h. 7m. a.m.

WEEK DAYS.	Swansea.					Liverpool.				London.				Equation of Time.	Moon's Trans- sit.			
	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.						
	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.	H.	M.	M.	S.	H.	M.
1 Tues ..	10	44	11	10	16	8	3	37	4	3	6	30	6	54	12	29	5	45
2 Wednes	11	38	..	..	15	4	4	34	5	12	7	20	7	51	12	16	6	41
3 Thurs..	0	15	1	2	15	4	5	57	6	51	8	28	9	13	12	3	7	38
4 Friday..	1	52	2	40	16	8	7	36	8	18	10	1	10	46	11	50	8	37
5 Satur..	3	21	3	56	19	0	8	52	9	24	11	30	..	..	11	36	9	35
6 Sunday	4	27	4	55	21	5	9	50	10	13	0	7	0	38	11	22	10	32
7 Mon ..	5	23	5	50	23	1	10	36	11	0	1	5	1	30	11	7	11	27
8 Tues ..	6	13	6	34	23	8	11	23	11	45	1	54	2	17	10	53	0a	22
9 Wednes	6	57	7	20	24	2	..	0	8	2	39	3	0	10	37	1	16	
10 Thurs..	7	41	8	1	24	0	0	31	0	53	3	22	3	44	10	22	2	9
11 Friday..	8	22	8	41	23	1	1	13	1	33	4	5	4	25	10	6	3	3
12 Satur..	9	2	9	21	21	6	1	52	2	12	4	45	5	4	9	49	3	56
13 Sunday	9	41	10	0	19	6	2	31	2	52	5	25	5	44	9	33	4	49
14 Mon ..	10	21	10	42	17	5	3	12	3	36	6	7	6	28	9	16	5	40
15 Tues ..	11	6	11	33	15	5	4	0	4	30	6	53	7	17	8	59	6	30
16 Wednes	..	0	6	14	0	0	5	6	5	46	7	47	8	22	8	41	7	19
17 Thurs..	0	45	1	31	13	11	6	34	7	18	9	3	9	45	8	24	8	5
18 Friday..	2	17	2	58	14	10	7	58	8	33	10	27	11	9	8	6	8	50
19 Satur..	3	33	4	0	16	3	9	4	9	28	11	46	..	..	7	48	9	34
20 Sunday	4	26	4	47	17	11	9	48	10	6	0	18	0	42	7	30	10	16
21 Mon ..	5	8	5	27	19	4	10	24	10	40	1	3	1	23	7	11	10	59
22 Tues ..	5	45	6	1	19	10	10	56	11	12	1	41	1	58	6	53	11	41
23 Wednes	6	17	6	33	20	10	11	27	11	44	2	13	2	28	6	35	morn.	
24 Thurs..	6	47	7	6	21	5	11	58	..	..	2	43	2	59	6	16	0	25
25 Friday..	7	21	7	37	21	7	0	17	0	32	3	13	3	31	5	58	1	11
26 Satur..	7	54	8	10	21	3	0	49	1	6	3	45	4	1	5	39	1	58
27 Sunday	8	30	8	47	20	8	1	23	1	41	4	18	4	35	5	20	2	48
28 Mon ..	9	7	9	25	19	9	1	57	2	17	4	53	5	10	5	2	3	41
29 Tues ..	9	45	10	8	18	4	2	35	2	58	5	30	5	49	4	43	4	35
30 Wednes	10	32	10	59	17	1	3	32	3	48	6	13	6	38	4	25	5	32
31 Thurs..	11	28	..	15	9	0	4	21	4	59	7	5	7	38	4	7	6	28

The above are in Greenwich Mean Time, if local Time be required for
 Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

New Moon .. 6th, 1h. 48m. p.m.	Full Moon .. 22nd, 1h. 18m. a.m.
First Quarter. 14th, 12h. 9m. a.m.	Last Quarter.. 29th, 4h. 34m. a.m.

M. D.	WEEK DAYS.	Barnstable.					Bridgewater.					Bristol.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	..	0	10	22	8	1	20	2	4	9	4	1	0	1	44	20	9	
2	Saturday..	1	0	1	45	23	7	2	50	3	33	10	6	2	30	3	13	22	5
3	Sunday ..	2	23	2	57	25	3	4	11	4	48	12	7	3	51	4	28	25	6
4	Monday..	3	28	3	56	26	11	5	20	5	51	14	8	5	0	5	31	28	6
5	Tuesday..	4	23	4	48	28	2	6	20	6	44	16	3	6	0	6	24	30	10
6	Wednesday	5	12	5	37	28	6	7	9	7	34	16	8	6	49	7	14	31	4
7	Thursday..	5	58	6	20	28	10	7	57	8	18	17	1	7	37	7	58	32	0
8	Friday ..	6	42	7	0	28	7	8	40	9	0	16	9	8	20	8	39	31	6
9	Saturday..	7	22	7	41	27	10	9	29	9	38	15	10	9	0	9	18	30	3
10	Sunday ..	8	0	8	21	26	9	9	55	10	14	14	6	9	35	9	54	28	2
11	Monday..	8	42	9	0	25	4	10	32	10	50	12	8	10	12	10	30	25	8
12	Tuesday..	9	22	9	44	23	11	11	7	11	27	10	11	10	47	11	7	23	0
13	Wednesday	10	5	10	31	22	7	11	47	..	9	3	11	27	11	54	20	7	
14	Thursday..	10	58	11	29	21	6	0	14	0	46	7	10	..	0	26	18	7	
15	Friday ..	..	0	6	21	2	1	1	20	1	59	7	5	1	0	1	39	18	0
16	Saturday..	0	47	1	24	21	8	2	37	3	13	8	0	2	17	2	53	18	10
17	Sunday ..	2	0	2	34	22	10	3	49	4	23	9	7	3	29	4	3	21	1
18	Monday..	3	2	3	25	23	11	4	53	5	20	10	11	4	33	5	0	23	0
19	Tuesday..	3	48	4	8	25	1	5	43	6	3	12	5	5	23	5	43	25	2
20	Wednesday	4	29	4	48	26	0	6	25	6	44	13	6	6	5	6	24	26	10
21	Thursday..	5	9	5	26	26	5	7	5	7	23	14	1	6	45	7	3	27	8
22	Friday ..	5	45	6	2	27	1	7	42	8	1	14	11	7	22	7	41	28	10
23	Saturday..	6	21	6	39	27	4	8	20	8	37	15	2	8	0	8	17	29	4
24	Sunday ..	6	58	7	16	27	3	8	56	9	14	15	1	8	36	8	54	29	2
25	Monday..	7	35	7	58	26	10	9	32	9	53	14	7	9	12	9	33	28	4
26	Tuesday..	8	17	8	40	26	2	10	10	10	30	13	9	9	50	10	10	27	2
27	Wednesday	9	2	9	27	25	2	10	50	11	12	12	6	10	30	10	52	25	4
28	Thursday..	9	52	10	19	24	3	11	34	..	11	4	11	14	11	41	23	7	
29	Friday ..	10	48	11	20	23	3	0	1	0	34	10	1	..	0	14	21	10	
30	Saturday..	11	57	..	23	1	1	1	10	1	50	9	11	0	50	1	30	21	7

The above are in Greenwich Mean Time, if local Time be required for
Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 8.

PHASES OF THE MOON.

New Moon .. 6th, 1h. 48m. p.m. | Full Moon .. 22nd, 1h. 18m. a.m.
 First Quarter. 14th, 12h. 9m. a.m. | Last Quarter.. 29th, 4h. 34m. a.m.

M. D.	WEEK DAYS.	Cardiff.					Gloucester.					Ilfracombe.				
		Morn		Even.		Height	Morn		Even.		Height	Morn		Even.		Height
		H.	M.	H.	M.	F.	H.	M.	H.	M.	F.	H.	M.	H.	M.	F.
1	Friday ..	0	50	1	34	22	9	1	45	2	29	18	11	..	0	20
2	Saturday..	2	20	3	3	24	2	3	15	3	58	20	8	1	9	1
3	Sunday ..	3	41	4	18	26	9	4	36	5	13	23	11	2	33	3
4	Monday..	4	50	5	21	29	5	5	45	6	15	27	3	3	38	4
5	Tuesday.	5	50	6	14	31	4	6	45	7	9	29	8	4	33	4
6	Wednesday	6	39	7	4	31	9	7	34	7	59	30	3	5	22	5
7	Thursday.	7	27	7	48	32	4	8	22	8	43	30	11	6	8	6
8	Friday ..	8	10	8	29	31	11	9	5	9	25	30	5	6	52	7
9	Saturday..	8	49	9	8	30	10	9	45	10	3	29	1	7	32	7
10	Sunday ..	9	25	9	44	29	1	10	20	10	39	26	11	8	11	8
11	Monday..	10	2	10	20	26	11	10	57	11	15	24	1	8	52	9
12	Tuesday..	10	37	10	57	24	8	11	32	11	52	21	4	9	32	9
13	Wednesday	11	17	11	44	22	7	..	0	12	18	9	10	15	10	41
14	Thursday.	..	0	16	20	10	10	0	39	1	11	16	7	11	8	11
15	Friday ..	0	50	1	29	20	5	1	45	2	24	16	0	..	0	16
16	Saturday..	2	7	2	43	21	1	3	2	3	38	16	11	0	57	1
17	Sunday ..	3	19	3	53	23	0	4	15	4	48	19	3	2	11	2
18	Monday..	4	23	4	49	24	8	5	18	5	45	21	4	3	12	3
19	Tuesday..	5	13	5	33	26	6	6	8	6	28	23	7	3	58	4
20	Wednesday	5	55	6	14	28	0	6	50	7	9	25	5	4	39	4
21	Thursday.	6	35	6	53	28	7	7	30	7	48	26	3	5	19	5
22	Friday ..	7	12	7	31	29	8	8	7	8	26	27	7	5	55	6
23	Saturday..	7	49	8	7	30	0	8	45	9	2	28	1	6	31	6
24	Sunday ..	8	26	8	44	29	11	9	21	9	39	27	11	7	8	7
25	Monday..	9	2	9	23	29	3	9	57	10	18	27	1	7	45	8
26	Tuesday.	9	40	10	0	28	3	10	35	10	55	25	9	8	27	8
27	Wednesday	10	20	10	42	26	7	11	15	11	37	23	9	9	12	9
28	Thursday.	11	4	11	31	25	2	11	59	..	21	11	10	10	2	10
29	Friday ..	..	0	4	23	8	8	0	26	0	59	20	1	10	58	11
30	Saturday..	0	40	1	20	28	5	1	35	2	15	19	9	..	0	7

The above are in Greenwich Mean Time, if local Time be required for
 Cardiff, *sub* 13m.—Gloucester, *sub* 10m.—Ilfracombe, *sub* 16m.

For further explanations, see page 3.

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PHASES OF THE MOON.

New Moon .. 6th, 1h. 48m. p.m. | Full Moon .. 22nd, 1h. 18m. a.
 First Quarter. 14th, 12h. 9m. a.m. | Last Quarter. 29th, 4h. 34m. a.

M. D.	WEEK DAYS.	Llanelly.				Milford Haven.				Newport.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Friday ..	0 15	0 55	16	6	0 15	0 55	16	2	1 0	1 44	21	21
2	Saturday..	1 44	2 30	17	6	1 44	2 30	17	1	2 30	3 13	22	22
3	Sunday ..	3 8	3 42	19	4	3 8	3 42	18	9	3 51	4 28	25	25
4	Monday..	4 13	4 41	21	2	4 13	4 41	20	5	5 0	5 31	26	26
5	Tuesday..	5 8	5 33	22	6	5 8	5 33	21	8	6 0	6 24	31	31
6	Wednesday	5 57	6 22	22	11	5 57	6 22	22	0	6 49	7 14	31	31
7	Thursday.	6 43	7 5	23	3	6 43	7 5	22	4	7 37	7 58	33	33
8	Friday ..	7 27	7 46	23	0	7 27	7 46	22	1	8 20	8 39	31	31
9	Saturday .	8 7	8 26	22	2	8 7	8 26	21	4	9 0	9 18	30	30
10	Sunday ..	8 46	9 6	21	0	8 46	9 6	20	3	9 35	9 54	28	28
11	Monday..	9 27	9 46	19	5	9 27	9 46	18	10	10 12	10 30	26	26
12	Tuesday..	10 7	10 29	17	11	10 7	10 29	17	5	10 47	11 7	23	23
13	Wednesday	10 50	11 16	16	5	10 50	11 16	16	1	11 27	11 54	31	31
14	Thursday.	11 43	..	15	2	11 43	..	15	0	..	0 26	19	19
15	Friday ..	0 14	0 51	14	10	0 14	0 51	14	8	1 0	1 39	18	18
16	Saturday..	1 32	2 9	15	4	1 32	2 9	15	2	2 17	2 53	19	19
17	Sunday ..	2 46	3 20	16	8	2 46	3 20	16	4	3 29	4 3	21	21
18	Monday..	3 47	4 10	17	11	3 47	4 10	17	5	4 33	5 0	23	23
19	Tuesday..	4 33	4 53	19	2	4 33	4 53	18	7	5 23	5 43	25	25
20	Wednesday	5 14	5 33	20	2	5 14	5 33	19	6	6 5	6 24	27	27
21	Thursday.	5 54	6 11	20	7	5 54	6 11	19	11	6 45	7 3	27	27
22	Friday ..	6 30	6 47	21	4	6 30	6 47	20	7	7 22	7 41	29	29
23	Saturday..	7 6	7 24	21	7	7 6	7 24	20	10	8 0	8 17	29	29
24	Sunday ..	7 43	8 1	21	6	7 43	8 1	20	9	8 36	8 54	29	29
25	Monday..	8 20	8 43	21	1	8 20	8 43	20	4	9 12	9 33	28	28
26	Tuesday..	9 2	9 25	20	4	9 2	9 25	19	8	9 50	10 10	27	27
27	Wednesday	9 47	10 12	19	3	9 47	10 12	18	8	10 30	10 52	25	25
28	Thursday.	10 37	11 4	18	3	10 37	11 4	17	9	11 14	11 41	23	23
29	Friday ..	11 33	..	17	2	11 33	..	16	9	..	0 14	23	23
30	Saturday..	0 5	0 42	17	0	0 5	0 42	16	7	0 50	1 30	22	22

The above are in Greenwich Mean Time, if local Time be required for
 Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.—Newport, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

New Moon .. 6th, 1h. 48m. p.m. | Full Moon .. 22nd, 1h. 18m. a.m.
 First Quarter. 14th, 12h. 9m. a.m. | Last Quarter. 29th, 4h. 34m. a.m.

W. WEEK DAYS.	Swansea.					Liverpool.				London.				Equation of Time.	Moon's Trans- sit.	
	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.				
	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.	H.			M.
1 Friday..	0	5	0	45	15	10	5	45	6	34	8	15	9	2	3 49	7m24
2 Satur..	1	34	2	20	17	0	7	21	8	1	9	45	10	30	3 31	8 19
3 Sunday	2	58	3	32	19	1	8	33	9	3	11	12	11	46	3 13	9 13
4 Mon ..	4	3	4	31	21	2	9	30	9	52	..	0	17	2 55	10 7	
5 Tues ..	4	58	5	23	22	9	10	16	10	36	0	44	1	8	2 37	11 0
6 Wednes	5	47	6	12	23	2	11	0	11	22	1	33	1	54	2 20	11 54
7 Thurs..	6	33	6	55	23	7	11	44	..	2	15	2	38	2 3	0a47	
8 Friday..	7	17	7	36	23	3	0	6	0	28	2	59	3	20	1 46	1 42
9 Satur..	7	57	8	16	22	4	0	48	1	9	3	41	4	0	1 30	2 36
10 Sunday	8	26	8	56	21	0	1	28	1	47	4	21	4	40	1 13	3 29
11 Mon ..	9	17	9	36	19	2	2	6	2	27	4	59	5	19	0 57	4 21
12 Tues ..	9	57	10	19	17	5	2	47	3	9	5	40	6	2	0 41	5 12
13 Wednes	10	40	11	6	15	9	3	33	3	58	6	25	6	50	0 26	6 0
14 Thurs..	11	33	..	14	4	4	4	30	5	6	7	15	7	47	0 10	6 45
15 Friday..	0	4	0	41	13	11	5	44	6	28	8	22	9	1	0 4	7 30
16 Satur..	1	22	1	59	14	6	7	8	7	43	9	40	10	17	0 18	8 12
17 Sunday	2	36	3	10	16	1	8	15	8	44	10	53	11	27	0 32	8 55
18 Mon ..	3	37	4	0	17	5	9	7	9	28	11	57	..	..	0 46	9 37
19 Tues ..	4	23	4	43	18	11	9	46	10	3	0	21	0	42	1 0	10 21
20 Wednes	5	4	5	23	20	0	10	21	10	36	1	1	1	19	1 13	11 6
21 Thurs..	5	44	6	1	20	7	10	55	11	12	1	38	1	54	1 25	11 53
22 Friday..	6	20	6	37	21	5	11	30	11	48	2	12	2	28	1 37	morn.
23 Satur..	6	56	7	14	21	8	..	0	7	2	46	3	3	3	1 49	0 43
24 Sunday	7	33	7	51	21	7	0	25	0	44	3	21	3	38	2 0	1 36
25 Mon ..	8	10	8	33	21	1	1	3	1	22	3	57	4	15	2 11	2 31
26 Tues ..	8	52	9	15	20	3	1	44	2	2	4	34	4	56	2 21	3 27
27 Wednes	9	37	10	2	19	0	2	25	2	48	5	15	5	38	2 31	4 24
28 Thurs..	10	27	10	54	17	10	3	15	3	42	6	3	6	31	2 40	5 20
29 Friday..	11	23	11	55	16	7	4	15	4	53	6	59	7	32	2 49	6 14
30 Satur..	..	0	32	16	5	5	5	33	6	18	8	9	8	50	2 57	7 7

The above are in Greenwich Time, if local Mean Time be required for
 Swansea, *sub.* 15 m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

New Moon .. 6th, 12h. 13m. a.m. | Full Moon .. 21st, 1h. 24m. p.
 First Quarter. 13th, 6h. 20m. p.m. | Last Quarter. 28th, 9h. 20m. a.

M. D.	WEEK DAYS	Llanelly.					Milford Haven.					Newport.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H.	M.	H.	M.	F.	H.	M.	H.	M.	F.	H.	M.	H.	M.	F.
1	Sunday ..	1	21	2	2	17 11	1	21	2	2	17 5	2	8	2	46	30
2	Monday..	2	39	3	12	19 1	2	39	3	12	18 6	3	21	3	55	20
3	Tuesday..	3	43	4	13	20 6	3	43	4	13	19 10	4	29	5	2	17
4	Wednesday	4	42	5	10	21 6	4	42	5	10	20 9	5	32	6	1	20
5	Thursday.	5	37	6	1	22 1	5	37	6	1	21 3	6	29	6	52	30
6	Friday ..	6	24	6	44	22 2	6	24	6	44	21 4	7	16	7	38	20
7	Saturday..	7	7	7	26	22 1	7	7	7	26	21 3	8	0	8	19	30
8	Sunday ..	7	46	8	6	21 6	7	46	8	6	20 9	8	39	8	58	30
9	Monday..	8	25	8	46	20 6	8	25	8	46	19 10	9	17	9	35	20
10	Tuesday..	9	7	9	25	19 5	9	7	9	25	18 10	9	55	10	10	20
11	Wednesday	9	45	10	4	18 3	9	45	10	4	17 9	10	28	10	45	20
12	Thursday.	10	25	10	46	17 1	10	25	10	46	16 8	11	3	11	23	30
13	Friday ..	11	8	11	32	16 2	11	8	11	32	15 10	11	45	..	20	30
14	Saturday..	12	0	..	..	15 4	12	0	..	..	15 2	0	12	0	44	19
15	Sunday ..	0	29	1	1	15 3	0	29	1	1	15 1	1	16	1	50	19
16	Monday..	1	35	2	13	16 1	1	35	2	13	15 9	2	22	2	56	20
17	Tuesday..	2	45	3	16	17 1	2	45	3	16	16 8	3	27	4	0	23
18	Wednesday	3	42	4	6	18 4	3	42	4	6	17 10	4	28	4	54	24
19	Thursday.	4	30	4	54	19 7	4	30	4	54	19 0	5	20	5	46	25
20	Friday ..	5	18	5	42	20 7	5	18	5	42	19 11	6	10	6	33	27
21	Saturday..	6	3	6	24	21 1	6	3	6	24	20 4	6	54	7	16	28
22	Sunday ..	6	42	7	4	21 9	6	42	7	4	20 11	7	36	7	57	30
23	Monday..	7	25	7	46	21 11	7	25	7	46	21 1	8	18	8	39	30
24	Tuesday..	8	8	8	32	21 9	8	8	8	32	20 11	9	0	9	22	20
25	Wednesday	8	53	9	18	21 2	8	53	9	18	20 5	9	42	10	4	25
26	Thursday.	9	42	10	6	20 8	9	42	10	6	19 7	10	26	10	47	27
27	Friday ..	10	32	10	59	19 3	10	32	10	59	18 8	11	10	11	36	25
28	Saturday..	11	25	11	51	18 1	11	25	11	51	17 7	..	0	5	23	0
29	Sunday ..	..	0	19	17 4	..	..	0	19	16 11	0	34	1	5	22	0
30	Monday..	0	53	1	31	17 5	0	53	1	31	17 0	1	42	2	18	22
31	Tuesday..	2	5	2	39	18 2	2	5	2	39	17 8	2	49	3	21	23

The above are in Greenwich Mean Time, if local Time be required for
 Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.—Newport, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

New Moon .. 6th, 12h. 13m. a.m. | Full Moon .. 21st, 1h. 24m. p.m.
 First Quarter. 13th, 6h. 20m. p.m. | Last Quarter.. 28th, 9h. 20m. a.m.

M. D.	WEEK DAYS.	Cardiff.				Gloucester.				Ilfracombe.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Sunday ..	1	58	2	36	24	8	2	53	3	31	21	4
2	Monday ..	3	11	3	45	26	5	4	6	4	40	23	6
3	Tuesday ..	1	19	4	52	28	6	5	14	5	47	26	1
4	Wednesday ..	5	22	5	51	29	11	6	17	6	46	27	11
5	Thursday ..	6	19	6	42	30	9	7	14	7	37	28	11
6	Friday ..	7	6	7	28	30	10	8	1	8	23	29	1
7	Saturday ..	7	50	8	9	30	9	8	45	9	4	28	11
8	Sunday ..	8	29	8	48	29	11	9	24	9	43	27	11
9	Monday ..	9	7	9	25	28	6	10	2	10	20	26	1
10	Tuesday ..	9	45	10	0	26	11	10	40	10	55	24	1
11	Wednesday ..	10	18	10	35	25	2	11	13	11	30	21	11
12	Thursday ..	10	53	11	13	23	6	11	48	..	19	11	9
13	Friday ..	11	35	..	22	3	0	0	8	0	30	18	4
14	Saturday ..	0	2	0	34	21	1	0	57	1	29	16	11
15	Sunday ..	1	6	1	40	21	0	2	1	2	35	16	9
16	Monday ..	2	12	2	46	22	1	3	7	3	41	18	2
17	Tuesday ..	3	17	3	50	23	6	4	12	4	45	19	11
18	Wednesday ..	4	18	4	44	25	3	5	13	5	39	22	1
19	Thursday ..	5	10	5	35	27	2	6	5	6	30	24	5
20	Friday ..	6	0	6	23	28	7	6	55	7	18	26	3
21	Saturday ..	6	44	7	6	29	3	7	39	8	1	27	1
22	Sunday ..	7	26	7	47	30	2	8	21	8	42	28	3
23	Monday ..	8	8	8	29	30	6	9	3	9	25	28	7
24	Tuesday ..	8	50	9	12	30	2	9	45	10	7	28	3
25	Wednesday ..	9	32	9	54	29	5	10	27	10	49	27	3
26	Thursday ..	10	16	10	37	28	1	11	11	11	32	25	7
27	Friday ..	11	0	11	26	26	7	11	55	..	23	9	9
28	Saturday ..	11	55	..	24	11	0	0	21	0	50	21	7
29	Sunday ..	0	24	0	55	23	11	1	19	1	50	20	5
30	Monday ..	1	32	2	8	24	0	2	27	3	3	20	6
31	Tuesday ..	2	39	3	11	25	0	3	34	4	6	21	9

The above are in Greenwich Mean Time, if local Time be required for
 Cardiff, *sub.* 13m. —Glo'ster, *sub.* 10m.—Ilfracombe, *sub.* 16m.

For further explanations, see page 3.

PHASES OF THE MOON.

New Moon .. 4th, 11h. 40m. a.m. | Full Moon .. 19th, 10h. 54m. p.
 First Quarter. 12th, 11h. 48m. a.m. | Last Quarter.. 26th, 2h. 14m. p.

M. D.	WEEK DAYS.	Barnstaple.				Bridgwater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	2	29	3	0	25	2	4	18	4	52	12	6
2	Thursday	3	32	4	2	26	0	5	27	5	58	13	6
3	Friday ..	4	29	4	57	26	7	6	25	6	52	14	3
4	Saturday..	5	21	5	45	26	9	7	20	7	42	14	6
5	Sunday ..	6	3	6	25	26	11	8	2	8	23	14	8
6	Monday..	6	45	7	3	26	9	8	43	9	0	14	6
7	Tuesday..	7	21	7	39	26	4	9	19	9	36	13	11
8	Wednesday	8	0	8	18	25	9	9	55	10	11	13	3
9	Thursday	8	38	8	54	25	0	10	29	10	43	12	3
10	Friday ..	9	15	9	33	24	2	11	0	11	17	11	3
11	Saturday..	9	52	10	11	23	4	11	34	11	53	10	2
12	Sunday ..	10	31	10	54	22	5	..	0	14	9	1	11
13	Monday..	11	19	11	47	21	11	0	41	1	9	8	5
14	Tuesday..	..	0	16	21	11	11	1	39	2	10	8	5
15	Wednesday	0	50	1	25	22	4	2	42	3	13	8	11
16	Thursday	1	58	2	31	23	5	3	45	4	20	10	4
17	Friday ..	3	0	3	29	24	8	4	52	5	23	11	10
18	Saturday..	3	57	4	25	25	11	5	52	6	21	13	5
19	Sunday ..	4	50	5	15	27	0	6	46	7	11	14	9
20	Monday..	5	40	6	3	27	6	7	37	8	2	15	5
21	Tuesday..	6	28	6	51	28	1	8	26	8	49	16	2
22	Wednesday	7	13	7	36	28	2	9	11	9	33	16	3
23	Thursday	8	0	8	25	27	11	9	54	10	17	15	11
24	Friday ..	8	50	9	13	27	3	10	39	11	0	15	1
25	Saturday	9	35	10	0	26	3	11	19	11	41	13	10
26	Sunday ..	10	23	10	47	25	0	..	0	5	12	3	11
27	Monday..	11	10	11	40	23	8	0	32	1	0	10	7
28	Tuesday..	..	0	13	22	11	11	1	31	2	7	9	8
29	Wednesday	0	49	1	30	23	0	2	41	3	16	9	9
30	Thursday	2	5	2	40	23	8	3	52	4	30	10	7

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m —Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

New Moon .. 4th, 11h. 40m. a.m. | Full Moon .. 19th, 10h. 54m. p.m.
 First Quarter. 12th, 11h. 48m. a.m. | Last Quarter.. 26th, 2h. 14m. p.m.

WEEK DAYS.	Cardiff.					Gloucester.					Ilfracombe.				
	Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
	H.	M.	H.	M.	F. I.	H.	M.	H.	M.	F. I.	H.	M.	H.	M.	F. I.
1 Wednesday	3	48	4	22	26 7	4	43	5	17	23 9	2	39	3	10	18 9
2 Thursday	4	57	5	28	28 0	5	52	6	23	25 5	3	42	4	12	19 8
3 Friday	5	55	6	22	28 11	6	50	7	17	26 7	4	39	5	7	20 3
4 Saturday	6	50	7	12	29 1	7	45	8	7	26 11	5	31	5	55	20 6
5 Sunday	7	32	7	53	29 5	8	27	8	45	27 3	6	13	6	35	20 8
6 Monday	8	13	8	31	29 1	9	8	9	25	26 11	6	55	7	13	20 6
7 Tuesday	8	49	9	6	28 6	9	44	10	1	26 1	7	31	7	49	20 0
8 Wednesday	9	25	9	41	27 6	10	20	10	36	24 11	8	10	8	28	19 5
9 Thursday	9	59	10	13	26 5	10	54	11	8	23 6	8	48	9	4	18 7
10 Friday	10	31	10	47	25 0	11	25	11	42	21 9	9	25	9	43	17 8
11 Saturday	11	4	11	23	23 9	11	59	..	20	3	10	2	10	21	16 9
12 Sunday	11	44	..	22	4	0	18	0	39	18 5	10	41	11	4	15 9
13 Monday	0	11	0	39	21 6	1	6	1	34	17 5	11	29	11	57	15 2
14 Tuesday	1	9	1	40	21 6	2	4	2	35	17 5	..	0	26	15	2
15 Wednesday	2	12	2	43	22 3	3	7	3	38	18 4	1	0	1	35	15 8
16 Thursday	3	15	3	50	23 11	4	10	4	45	20 5	2	8	2	41	16 10
17 Friday	4	22	4	53	25 10	5	17	5	48	22 9	3	10	3	39	18 2
18 Saturday	5	22	5	51	27 10	6	17	6	46	25 3	4	7	4	35	19 7
19 Sunday	6	16	6	41	29 6	7	11	7	36	27 5	5	0	5	25	20 9
20 Monday	7	7	7	32	30 4	8	2	8	27	28 5	5	50	6	13	21 4
21 Tuesday	7	56	8	19	31 3	8	51	9	14	29 7	6	38	7	1	21 11
22 Wednesday	8	41	9	3	31 4	9	36	9	58	29 8	7	23	7	46	22 0
23 Thursday	9	24	9	47	31 0	10	19	10	42	29 3	8	9	8	35	21 9
24 Friday	10	9	10	30	29 11	11	4	11	25	27 11	9	0	9	23	21 0
25 Saturday	10	49	11	11	28 4	11	44	..	25	11	9	45	10	9	19 11
26 Sunday	11	35	..	26	5	0	6	0	30	23 6	10	33	10	57	18 7
27 Monday	0	2	0	29	24 3	0	57	1	23	20 10	11	20	11	50	17 1
28 Tuesday	1	1	1	37	23 2	1	56	2	32	19 5	..	0	23	16	3
29 Wednesday	2	11	2	46	23 3	3	6	3	41	19 7	0	59	1	40	16 4
30 Thursday	3	22	4	0	24 3	4	17	4	55	20 10	2	15	2	50	17 1

The above are in Greenwich Mean Time, if local Time be required for
 Cardiff, *sub* 13m.—Gloucester, *sub* 10m.—Ilfracombe, *sub* 16m.

For further explanations, see page 3.

PHASES OF THE MOON.

New Moon .. 4th, 12h. 23m. a.m. | Full Moon .. 19th, 6h. 35m. a.m.
 First Quarter. 12th, 3h. 51m. a.m. | Last Quarter.. 25th, 8h. 45m. p.m.

M. D.	WEEK DAYS.	Cardiff.				Gloucester.				Ilfracombe.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	4	37	5	9	25	10	5	32	6	5	22	9
2	Saturday..	5	39	6	7	27	2	6	34	7	2	24	5
3	Sunday ..	6	33	6	56	28	1	7	28	7	51	25	7
4	Monday..	7	19	7	39	28	4	8	14	8	34	25	11
5	Tuesday..	7	57	8	15	28	11	8	52	9	10	26	7
6	Wednesday	8	31	8	48	28	9	9	26	9	43	26	5
7	Thursday.	9	5	9	21	28	4	10	0	10	16	25	11
8	Friday ..	9	36	9	51	27	6	10	31	10	46	24	11
9	Saturday..	10	6	10	21	26	7	11	1	11	16	23	9
10	Sunday ..	10	36	10	52	25	5	11	31	11	47	22	3
11	Monday..	11	9	11	27	24	0	..	0	4	20	6	10
12	Tuesday..	11	49	..	22	7	0	0	22	0	44	18	9
13	Wednesday	0	14	0	44	21	6	1	9	1	39	17	5
14	Thursday.	1	19	1	53	21	8	2	14	2	48	17	7
15	Friday ..	2	28	3	5	22	9	3	23	4	0	18	11
16	Saturday..	3	43	4	18	24	10	4	38	5	13	21	6
17	Sunday ..	4	54	5	25	27	3	5	49	6	20	24	7
18	Monday..	5	55	6	23	29	8	6	50	7	18	27	7
19	Tuesday..	6	50	7	18	30	9	7	45	8	13	28	11
20	Wednesday	7	43	8	8	32	0	8	38	9	3	30	7
21	Thursday.	8	29	8	50	32	9	9	24	9	45	31	5
22	Friday ..	9	13	9	34	32	4	10	8	10	29	30	11
23	Saturday..	9	53	10	14	31	4	10	48	11	9	29	8
24	Sunday ..	10	32	10	50	29	6	11	27	11	45	27	5
25	Monday..	11	10	11	34	27	2	..	0	5	24	5	10
26	Tuesday..	12	0	..	24	6	0	0	29	0	55	21	2
27	Wednesday	0	30	1	3	22	6	1	25	1	58	18	7
28	Thursday.	1	42	2	21	21	8	2	37	3	16	17	7
29	Friday ..	3	1	3	40	22	6	3	56	4	35	18	7
30	Saturday..	4	19	4	54	24	3	5	14	5	49	20	10
31	Sunday ..	5	27	5	53	25	10	6	22	6	48	22	9
		4	11	4	37	18	2						

The above are in Greenwich Mean Time, if local Time be required for
 Cardiff, *sub.* 13m. —Glo'ster, *sub.* 10m.—Ilfracombe, *sub.* 16m.

For further explanations, see page 3.

PHASES OF THE MOON.

New Moon .. 4th, 12h. 23m. a.m. | Full Moon .. 19th, 6h. 35m. a.m.
 First Quarter. 12th, 3h. 51m. a.m. | Last Quarter. 25th, 8h. 45m. p.m.

M. D.	WEEK DAYS.	Llanelly.					Milford Haven.					Newport.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H.	M.	H.	M.	P.	H.	M.	H.	M.	P.	H.	M.	H.	M.	P.
1	Friday ..	3	59	4	29	18	3	59	4	29	18	4	47	5	19	24
2	Saturday..	4	58	5	26	19	4	58	5	26	19	5	49	6	17	26
3	Sunday ..	5	51	6	15	20	5	51	6	15	19	6	43	7	6	27
4	Monday..	6	36	6	55	20	6	36	6	55	19	7	29	7	49	27
5	Tuesday..	7	14	7	32	20	7	14	7	32	20	8	7	8	25	28
6	Wednesdy	7	48	8	6	20	8	48	8	6	20	8	41	8	58	28
7	Thursday.	8	23	8	41	20	8	23	8	41	19	9	15	9	31	27
8	Friday ..	8	58	9	15	19	8	58	9	15	19	9	46	10	1	26
9	Saturday..	9	31	9	48	19	9	31	9	48	18	10	16	10	31	25
10	Sunday ..	10	5	10	24	18	10	5	10	24	17	10	46	11	2	24
11	Monday..	10	42	11	0	17	10	42	11	0	17	11	19	11	37	22
12	Tuesday..	11	20	11	42	16	11	20	11	42	16	11	59	..	21	0
13	Wednesdy	..	0	9	15	8	..	0	9	15	5	0	24	0	54	19
14	Thursday.	0	41	1	15	15	0	41	1	15	15	1	29	2	3	19
15	Friday ..	1	53	2	32	16	1	53	2	32	16	2	38	3	15	21
16	Saturday..	3	10	3	42	18	3	10	3	42	17	3	53	4	28	23
17	Sunday ..	4	15	4	45	19	4	15	4	45	19	5	4	5	35	26
18	Monday..	5	14	5	42	21	5	14	5	42	20	6	5	6	33	29
19	Tuesday..	6	8	6	35	22	6	8	6	35	21	7	0	7	28	30
20	Wednesdy	7	0	7	25	23	7	0	7	25	22	7	53	8	18	31
21	Thursday.	7	46	8	8	23	7	46	8	8	22	8	39	9	0	32
22	Friday ..	8	33	8	55	23	8	33	8	55	22	9	23	9	44	32
23	Saturday..	9	17	9	40	22	9	17	9	40	21	10	3	10	24	31
24	Sunday ..	10	1	10	22	21	10	1	10	22	20	10	42	11	0	28
25	Monday..	10	44	11	7	19	10	44	11	7	19	11	20	11	44	26
26	Tuesday..	11	30	11	56	17	11	30	11	56	17	..	0	10	23	2
27	Wednesdy	..	0	27	16	4	..	0	27	16	0	0	40	1	13	20
28	Thursday.	1	3	1	45	15	1	3	1	45	15	1	52	2	31	19
29	Friday ..	2	28	3	6	16	2	28	3	6	16	3	11	3	50	20
30	Saturday..	3	43	4	15	17	3	43	4	15	17	4	29	5	4	22
31	Sunday ..	4	46	5	12	18	4	46	5	12	18	5	37	6	3	24

The above are in Greenwich Mean Time, if local Time be required for
 Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.—Newport, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

New Moon .. 4th, 12h. 23m. a.m. | Full Moon .. 19th, 6h. 35m. a.m.
 First Quarter. 12th, 3h. 51m. a.m. | Last Quarter. 25th, 8h. 45m. p.m.

M. WEEK D. DAYS.	Swansea.						Liverpool.				London.				Equation of Time.	Moon's Tran- sit.
	Morn.		Even.		Height		Morn.		Even.		Morn.		Even.			
	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.	H.	M.		
1 Friday..	3	49	4	19	18	4	9	18	9	43	..	0	2	3	33	9m53
2 Satur..	4	48	5	16	19	5	10	7	10	30	0	32	0	58	3 45	10 46
3 Sunday	5	41	6	5	20	2	10	53	11	15	1	24	1	48	3 56	11 37
4 Mon ..	6	26	6	45	20	4	11	36	11	56	2	10	2	31	4 7	0a26
5 Tues ..	7	4	7	22	20	9	..	0	15	2	52	3	11	4	17	1 13
6 Wednes	7	38	7	56	20	8	0	33	0	50	3	29	3	46	4 28	1 58
7 Thurs..	8	13	8	31	20	4	1	8	1	25	4	2	4	20	4 37	2 41
8 Friday..	8	48	9	5	19	9	1	42	1	58	4	37	4	54	4 47	3 24
9 Satur..	9	21	9	38	19	0	2	15	2	32	5	15	5	28	4 56	4 5
10 Sunday	9	55	10	14	18	1	2	49	3	7	5	45	6	4	5 4	4 47
11 Mon ..	10	32	10	50	16	11	3	28	3	48	6	23	6	44	5 12	5 30
12 Tues ..	11	10	11	32	15	9	4	10	4	35	7	5	7	27	5 20	6 15
13 Wednes	11	59	..	14	11		5	4	5	38	7	52	8	20	5 27	7 3
14 Thurs..	0	31	1	5	15	0	6	17	6	54	8	55	9	30	5 34	7 54
15 Friday..	1	43	2	22	15	10	7	29	8	3	10	4	10	38	5 40	8 49
16 Satur..	3	0	3	32	17	6	8	35	9	3	11	14	11	48	5 46	9 46
17 Sunday	4	5	4	35	19	6	9	30	9	56	..	0	17	5	51	10 46
18 Mon ..	5	4	5	32	21	5	10	21	10	45	0	46	1	12	5 55	11 46
19 Tues ..	5	58	6	25	22	3	11	9	11	35	1	38	2	2	5 59	morn
20 Wednes	6	50	7	15	23	4	12	0	..		2	25	2	51	6 3	0 44
21 Thurs..	7	36	7	58	23	11	0	26	0	48	3	15	3	39	6 6	1 41
22 Friday..	8	23	8	45	23	7	1	10	1	34	4	0	4	22	6 8	2 36
23 Satur..	9	7	9	30	22	9	1	55	2	17	4	46	5	8	6 10	3 30
24 Sunday	9	51	10	12	21	3	2	41	3	3	5	30	5	55	6 11	4 22
25 Mon ..	10	34	10	57	19	5	3	26	3	50	6	18	6	42	6 12	5 14
26 Tues ..	11	20	11	46	17	4	4	18	4	49	7	7	7	35	6 12	6 6
27 Wednes	..	0	17	15	8		5	22	6	0	8	5	8	38	6 11	6 58
28 Thurs..	0	53	1	35	15	0	6	43	7	22	9	15	9	53	6 10	7 50
29 Friday..	2	18	2	56	15	8	7	59	8	32	10	31	11	10	6 9	8 42
30 Satur..	3	33	4	5	17	1	9	4	9	30	11	45	..		6 7	9 33
31 Sunday	4	36	5	2	18	4	9	57	10	19	0	18	0	46	6 4	10 22

Subtract from Mean Time.—Add to Apparent Time.

The above are in Greenwich Time, if local Mean Time be required for
 Swansea, *sub.* 15 m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

New Moon .. 2nd, 2h. 33m. p.m. | Full Moon .. 17th, 1h. 36m. p.m.
 First Quarter. 10th, 5h. 57m. p.m. | Last Quarter. 24th, 6h. 4m. a.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgwater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	P.	I.	H.	M.	H.	M.	P.	I.
1	Monday..	4	49	5	12	25	7	6	45	7	9	13	0
2	Tuesday..	5	33	5	51	25	11	7	29	7	49	13	5
3	Wednesday	6	8	6	25	26	5	8	7	8	23	14	1
4	Thursday..	6	41	6	57	26	8	8	39	8	55	14	4
5	Friday ..	7	11	7	28	26	8	9	9	9	25	14	4
6	Saturday..	7	43	8	0	26	5	9	40	9	55	14	1
7	Sunday ..	8	15	8	30	25	11	10	8	10	21	13	5
8	Monday..	8	47	9	4	25	2	10	37	10	52	12	6
9	Tuesday..	9	20	9	40	24	4	11	6	11	23	11	5
10	Wednesday	10	0	10	21	23	3	11	40	..	10	1	1
11	Thursday..	10	43	11	13	22	3	0	3	0	29	8	10
12	Friday ..	11	47	..	..	21	11	1	0	1	39	8	5
13	Saturday .	0	25	1	12	22	4	2	18	3	2	8	11
14	Sunday ..	1	56	2	35	23	9	3	43	4	23	10	9
15	Monday..	3	6	3	41	25	7	4	59	5	36	13	0
16	Tuesday..	4	10	4	39	27	3	6	6	6	35	15	1
17	Wednesday	5	6	5	34	28	1	7	3	7	30	16	2
18	Thursday..	5	55	6	19	29	2	7	56	8	17	17	6
19	Friday ..	6	43	7	3	29	7	8	41	9	1	18	0
20	Saturday..	7	24	7	50	29	4	9	21	9	45	17	8
21	Sunday ..	8	12	8	34	27	6	10	5	10	25	15	5
22	Monday..	8	54	9	15	27	2	10	43	11	1	15	0
23	Tuesday..	9	37	10	0	25	6	11	20	11	40	12	11
24	Wednesday	10	21	10	45	23	8	..	0	3	10	7	11
25	Thursday..	11	14	11	52	22	1	0	30	1	3	8	8
26	Friday ..	..	..	0	33	21	6	1	44	2	25	7	10
27	Saturday..	1	16	1	57	21	10	3	5	3	44	8	4
28	Sunday ..	2	37	3	9	23	0	4	26	5	2	9	9
29	Monday..	3	39	4	5	24	3	5	34	6	0	11	4
30	Tuesday..	4	27	4	47	25	3	6	23	6	43	12	7
31	Wednesday	5	6	5	25	25	8	7	3	7	21	13	1

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

New Moon .. 2nd, 2h. 33m. p.m. | Full Moon .. 17th, 1h. 36m. p.m.
 First Quarter. 10th, 5h. 57m. p.m. | Last Quarter.. 24th, 6h. 4m. a.m.

M. D.	WEEK DAYS.	Cardiff.				Gloucester.				Ilfracombe.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Monday..	6	15	6	39	27	3	7	10	7	34	24	7
2	Tuesday..	6	59	7	19	27	10	7	54	8	14	25	3
3	Wednesday..	6	37	7	53	28	7	8	32	8	48	26	3
4	Thursday..	8	9	8	25	29	0	9	4	9	20	26	9
5	Friday ..	8	39	8	55	29	0	9	34	9	50	26	9
6	Saturday..	9	10	9	25	28	7	10	5	10	20	26	3
7	Sunday ..	9	38	9	51	27	10	10	33	10	46	25	3
8	Monday..	10	7	10	22	26	7	11	2	11	17	23	9
9	Tuesday..	10	36	10	53	25	3	11	31	11	48	22	1
10	Wednesday..	11	10	11	33	23	8	..	0	5	20	1	10
11	Thursday..	11	59	..	..	22	1	0	28	0	54	18	2
12	Friday ..	0	31	1	9	21	6	1	25	2	4	17	5
13	Saturday ..	1	48	2	32	22	3	2	43	3	27	18	4
14	Sunday ..	3	13	3	53	24	5	4	8	4	48	21	0
15	Monday..	4	29	5	6	27	3	5	24	6	1	24	7
16	Tuesday..	5	36	6	5	29	11	6	31	7	0	27	11
17	Wednesday..	6	33	7	0	31	3	7	28	7	55	29	7
18	Thursday..	7	26	7	47	32	11	8	21	8	42	31	7
19	Friday ..	8	11	8	31	33	6	9	6	9	26	32	4
20	Saturday..	8	51	9	15	33	2	9	46	10	10	31	11
21	Sunday ..	9	35	9	55	30	4	10	30	10	50	28	5
22	Monday..	10	13	10	31	29	9	11	8	11	26	27	9
23	Tuesday..	10	50	11	10	27	2	11	45	..	..	24	5
24	Wednesday..	11	33	12	0	24	3	0	5	0	28	20	10
25	Thursday..	..	..	0	33	21	10	0	55	1	28	17	9
26	Friday ..	1	14	1	55	20	10	2	9	2	50	16	7
27	Saturday..	2	35	3	14	21	5	3	30	4	9	17	3
28	Sunday ..	3	56	4	32	23	3	4	51	5	27	19	7
29	Monday..	5	4	5	30	25	2	5	59	6	25	21	11
30	Tuesday..	5	53	6	13	26	9	6	48	7	8	23	11
31	Wednesday..	6	33	6	51	27	5	7	28	7	46	24	9

The above are in Greenwich Mean Time, if local Time be required for
 Cardiff, *sub* 13m.—Gloucester, *sub*. 10m.—Ilfracombe, *sub*. 16m.

For further explanations, see page 3.

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PHASES OF THE MOON.

New Moon .. 2nd, 2h. 33m. p.m. | Full Moon .. 17th, 1h. 36m. p.
 First Quarter. 10th, 5h. 57m. p.m. | Last Quarter. 24th, 6h. 4m. a.

M. D.	WEEK DAYS.	Llanelly.				Milford Haven.				Newport.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Monday..	5	34	5	57	19	8	5	34	5	57	19	1
2	Tuesday..	6	18	6	36	20	1	6	18	6	36	19	5
3	Wednesday	6	53	7	10	20	7	6	53	7	10	19	11
4	Thursday..	7	26	7	42	20	10	7	26	7	42	20	2
5	Friday ..	7	56	8	13	20	10	7	56	8	13	20	2
6	Saturday..	8	28	8	45	20	7	8	28	8	45	19	11
7	Sunday ..	9	0	9	15	20	1	9	0	9	15	19	5
8	Monday..	9	32	9	49	19	3	9	32	9	49	18	8
9	Tuesday..	10	5	10	25	18	4	10	5	10	25	17	10
10	Wednesday	10	41	11	6	17	2	10	44	11	6	16	9
11	Thursday..	11	28	11	57	16	1	11	28	11	57	15	9
12	Friday ..	..	..	0	32	15	8	..	..	0	32	15	5
13	Saturday..	1	10	1	57	16	2	1	10	1	57	15	10
14	Sunday ..	2	41	3	20	17	9	2	41	3	20	17	3
15	Monday..	3	51	4	26	19	8	3	51	4	26	19	1
16	Tuesday..	4	55	5	24	21	6	4	55	5	24	20	9
17	Wednesday	5	51	6	19	22	5	5	51	6	19	21	7
18	Thursday..	6	40	7	4	23	7	6	40	7	4	22	8
19	Friday ..	7	28	7	48	24	1	7	28	7	48	23	1
20	Saturday..	8	9	8	35	23	9	8	9	8	35	22	10
21	Sunday ..	8	57	9	19	21	10	8	57	9	19	21	0
22	Monday..	9	39	10	0	21	5	9	39	10	0	20	8
23	Tuesday..	10	22	10	44	19	7	10	22	10	44	19	0
24	Wednesday	11	6	11	30	17	7	11	6	11	30	17	2
25	Thursday..	11	59	..	15	11	11	11	59	..	15	7	0
26	Friday ..	0	37	1	18	15	2	0	37	1	18	15	0
27	Saturday..	2	1	2	42	15	7	2	1	2	42	15	4
28	Sunday ..	3	22	3	54	16	10	3	22	3	54	16	6
29	Monday..	4	24	4	50	18	3	4	24	4	50	17	9
30	Tuesday..	5	12	5	32	19	4	5	12	5	32	18	9
31	Wednesday	5	51	6	9	19	9	5	51	6	9	19	2

The above are in Greenwich Mean Time, if local Time be required for
 Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.—Newport, *sub.* 12m.
 For further explanations, see page 3.

PHASES OF THE MOON.

New Moon .. 2nd, 2h. 33m. p.m. | Full Moon .. 17th, 1h. 36m. p.m.
 First Quarter. 10th, 5h. 57m. p.m. | Last Quarter.. 24th, 6h. 4m. a.m.

D M.	WEEK DAYS.	Swansea.				Liverpool.				London.				Equation of Time.	Moon's Trans- sit.				
		Morn.		Even.		Morn.		Even.		Morn.		Even.							
		H.	M.	H.	M.	P.	I.	H.	M.	H.	M.	H.	M.			M.	S.	H.	M.
1	Mon ..	5	24	5	47	19	6	10	37	10	59	1	13	1	36	6	1	11	10
2	Tues ..	6	8	6	26	19	11	11	18	11	36	1	55	2	15	5	57	11	55
3	Wednes	6	43	7	0	20	7	11	54	..	..	2	34	2	52	5	52	0a	39
4	Thurs..	7	16	7	32	20	10	0	11	0	27	3	9	3	25	5	47	1	22
5	Friday.	7	46	8	3	20	10	0	43	0	58	3	40	3	56	5	41	2	4
6	Satur..	8	18	8	35	20	7	1	15	1	30	4	10	4	27	5	34	2	45
7	Sunday	8	50	9	5	19	11	1	46	2	0	4	42	4	58	5	27	3	27
8	Mon ..	9	22	9	39	19	0	2	15	2	33	5	13	5	28	5	20	4	11
9	Tues ..	9	55	10	15	17	11	2	50	3	7	5	46	6	5	5	11	4	57
10	Wednes	10	34	10	56	16	7	3	29	3	50	6	23	6	45	5	3	5	45
11	Thurs..	11	18	11	47	15	4	4	17	4	47	7	7	7	34	4	53	6	36
12	Friday.	..	..	0	22	14	11	5	24	6	6	8	3	8	40	4	43	7	31
13	Satur..	1	0	1	47	15	5	6	49	7	32	9	21	9	59	4	33	8	28
14	Sunday	2	31	3	10	17	3	8	10	8	44	10	42	11	22	4	22	9	27
15	Mon ..	3	41	4	16	19	6	9	12	9	40	11	57	..	..	4	10	10	26
16	Tues ..	4	45	5	14	21	7	10	5	10	28	0	26	0	55	3	58	11	24
17	Wednes	5	41	6	9	22	8	10	53	11	19	1	21	1	46	3	45	morn.	..
18	Thurs..	6	30	6	54	24	0	11	43	..	..	2	10	2	35	3	32	0	21
19	Friday.	7	18	7	38	24	6	0	5	0	29	2	58	3	19	3	18	1	17
20	Satur..	7	59	8	25	24	2	0	50	1	11	3	42	4	2	3	4	2	11
21	Sunday	8	47	9	9	21	11	1	36	1	57	4	23	4	48	2	49	3	5
22	Mon ..	9	29	9	50	21	6	2	19	2	40	5	10	5	32	2	34	3	59
23	Tues ..	10	12	10	34	19	5	3	2	3	26	5	54	6	17	2	19	4	53
24	Wednes	10	56	11	20	17	1	3	50	4	17	6	42	7	7	2	3	5	46
25	Thurs.	11	49	..	..	15	2	4	49	5	26	7	34	8	5	1	47	6	38
26	Friday.	0	27	1	8	14	4	6	12	6	56	8	42	9	26	1	30	7	30
27	Satur..	1	51	2	32	14	10	7	36	8	11	10	6	10	45	1	13	8	19
28	Sunday	3	12	3	44	16	3	8	46	9	14	11	23	11	59	0	56	9	7
29	Mon ..	4	14	4	40	17	10	9	39	10	0	..	0	28	..	0	38	9	53
30	Tues ..	5	2	5	22	19	1	10	19	10	35	0	54	1	16	0	20	10	38
31	Wednes	5	41	6	0	19	7	10	53	11	10	1	36	1	53	0	2	11	21

Subtract from Mean Time.—Add to Apparent Time.

The above are in Greenwich Mean Time, if local Time be required for
 Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

New Moon .. 1st, 6h. 7m. a.m. | Last Quarter. 22nd, 6h. 54m. p.m.
 First Quarter. 9th, 5h. 50m. a.m. | New Moon .. 30th, 10h. 43m. p.m.
 Full Moon .. 15th, 9h. 9m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgwater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday..	5	43	5	58	26	4	7	40	7	57	13	11
2	Friday ..	6	12	6	28	26	9	8	11	8	26	14	6
3	Saturday..	6	44	6	58	26	11	8	42	8	56	14	8
4	Sunday ..	7	15	7	29	26	8	9	13	9	26	14	4
5	Monday..	7	45	8	0	26	3	9	40	9	55	13	10
6	Tuesday..	8	17	8	34	25	7	10	10	10	25	13	0
7	Wednesday	8	53	9	10	24	8	10	42	10	58	11	10
8	Thursday..	9	31	9	53	23	8	11	15	11	36	10	7
9	Friday ..	10	19	10	46	22	7	12	0	..	9	3	
10	Saturday..	11	19	11	58	22	1	0	30	1	9	8	8
11	Sunday ..	..	0	44	22	6		1	51	2	36	9	2
12	Monday..	1	30	2	10	23	11	3	18	3	58	10	11
13	Tuesday..	2	45	3	17	25	10	4	35	5	11	13	4
14	Wednesday	3	50	4	17	27	6	5	45	6	13	15	5
15	Thursday..	4	41	5	8	28	10	6	37	7	4	17	1
16	Friday ..	5	33	5	55	29	4	7	29	7	53	17	8
17	Saturday..	6	19	6	42	29	8	8	17	8	40	18	1
18	Sunday ..	7	3	7	24	29	3	9	1	9	21	17	7
19	Monday..	7	45	8	6	28	4	9	40	10	0	16	5
20	Tuesday..	8	27	8	47	26	11	10	19	10	37	14	8
21	Wednesday	9	9	9	31	25	2	10	56	11	15	12	6
22	Thursday..	9	53	10	20	23	6	11	36	..	10	5	
23	Friday ..	10	47	11	21	21	11	0	2	0	33	8	5
24	Saturday..	11	58	..	21	3		1	11	1	51	7	6
25	Sunday ..	0	39	1	24	21	7	2	31	3	13	7	11
26	Monday..	2	3	2	38	22	7	3	50	4	27	9	3
27	Tuesday..	3	5	3	28	23	11	4	57	5	22	10	11
28	Wednesday	3	52	4	13	25	0	5	47	6	9	12	3
29	Thursday..	4	34	4	51	25	11	6	30	6	47	13	5
30	Friday ..	5	9	5	27	26	3	7	5	7	24	13	10

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

New Moon .. 1st, 6h. 7m. a.m. | Last Quarter. 22nd, 6h. 54m. p.m.
 First Quarter. 9th, 5h. 50m. a.m. | New Moon ... 30th, 10h. 43m. p.m.
 Full Moon .. 15th, 9h. 9m. p.m.

M. D.	WEEK DAYS.	Swansea.						Liverpool.				London.				Equation of Time.	Moon's Trans- sit.
		Morn.		Even.		Height	Morn.		Even.		Morn.		Even.				
		H.	M.	H.	M.		F.	I.	H.	M.	H.	M.	H.	M.	H.			M.
1	Thurs..	6	18	6	33	20	5	11	28	11	44	2	10	2	26	0 16	0a 3
2	Friday..	6	47	7	3	21	0	11	58	..	..	2	44	2	59	0 35	0 44
3	Satur..	7	19	7	33	21	2	0	14	0	30	3	13	3	28	0 54	1 27
4	Sunday	7	50	8	4	20	10	0	44	1	2	3	43	3	57	1 14	2 10
5	Mon ..	8	20	8	36	20	4	1	16	1	31	4	14	4	28	1 34	2 54
6	Tues ..	8	52	9	9	19	6	1	47	2	2	4	43	4	59	1 54	3 41
7	Wednes	9	28	9	45	18	4	2	19	2	38	5	15	5	32	2 14	4 30
8	Thurs..	10	6	10	28	17	1	2	57	3	19	5	52	6	12	2 34	5 22
9	Friday..	10	54	11	21	15	9	3	44	4	14	6	35	7	1	2 55	6 17
10	Satur..	11	54	..	15	2	2	4	50	5	32	7	31	8	6	3 15	7 12
11	Sunday	0	33	1	19	15	8	6	19	7	7	8	49	9	32	3 36	8 9
12	Mon ..	2	5	2	45	17	5	7	48	8	23	10	16	10	58	3 57	9 6
13	Tues ..	3	20	3	52	19	10	8	53	9	21	11	35	..	..	4 18	10 3
14	Wednes	4	25	4	52	21	11	9	48	10	10	0	6	0	35	4 40	10 59
15	Thurs..	5	16	5	43	23	7	10	30	10	54	1	3	1	27	5 1	11 55
16	Friday..	6	8	6	30	24	2	11	18	11	41	1	48	2	11	5 22	morn
17	Satur..	6	54	7	17	24	7	..	0	5	..	2	34	2	56	5 43	0 50
18	Sunday	7	38	7	59	24	1	0	28	0	50	3	19	3	41	6 4	1 45
19	Mon ..	8	20	8	41	22	11	1	11	1	31	4	2	4	23	6 26	2 41
20	Tues ..	9	2	9	22	21	2	1	52	2	12	4	43	5	4	6 47	3 36
21	Wednes	9	44	10	6	19	0	2	33	2	55	5	25	5	46	7 8	4 31
22	Thurs..	10	28	10	55	16	11	3	19	3	44	6	10	6	35	7 29	5 24
23	Friday..	11	22	11	56	14	11	4	16	4	52	7	1	7	33	7 49	6 15
24	Satur..	..	0	0	33	14	0	5	34	6	19	8	8	8	51	8 10	7 4
25	Sunday	1	14	1	59	14	5	7	2	7	43	9	32	10	12	8 31	7 51
26	Mon ..	2	38	3	13	15	9	8	16	8	47	10	53	11	28	8 51	8 36
27	Tues ..	3	40	4	3	17	5	9	10	9	30	..	0	0	0	9 11	9 19
28	Wednes	4	27	4	48	18	9	9	50	10	7	0	24	0	44	9 31	10 1
29	Thurs..	5	9	5	26	19	11	10	25	10	39	1	5	1	24	9 50	10 43
30	Friday..	5	44	6	2	20	4	10	55	11	13	1	42	1	57	10 10	11 25

Add to Mean Time.—Subtract from Apparent Time.

The above are in Greenwich Time, if local Mean Time be required for
 Swansea, *sub.* 15 m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

New Moon .. 1st, 6h. 7m. a.m. | Last Quarter. 22nd, 6h 54m p.m.
 First Quarter. 9th, 5h. 50m. a.m. | New Moon .. 30th, 10h. 43m. p.m.
 Full Moon .. 15th, 9h. 9m. p.m.

M. D.	WEEK DAYS.	Llanelly.						Milford Haven.						Newport.					
		Morn.		Even		Height		Morn.		Even		Height		Morn.		Even		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday	6	28	6	43	20	6	6	28	6	43	19	10	7	20	7	37	27	1
2	Friday ..	6	57	7	13	21	0	6	57	7	13	20	3	7	51	8	6	28	
3	Saturday..	7	29	7	43	21	2	7	29	7	43	20	5	8	22	8	36	28	
4	Sunday ..	8	0	8	14	20	10	8	0	8	14	20	2	8	53	9	6	28	
5	Monday..	8	30	8	46	20	5	8	30	8	46	19	9	9	20	9	35	27	
6	Tuesday..	9	2	9	19	19	8	9	2	9	19	19	1	9	50	10	5	26	
7	Wednesday	9	38	9	55	18	8	9	38	9	55	18	2	10	22	10	38	24	
8	Thursday..	10	16	10	38	17	7	10	16	10	38	17	2	10	55	11	16	22	1
9	Friday ..	11	4	11	31	16	5	11	4	11	31	16	1	11	40	..	..	21	
10	Saturday..	..	0	4	15	11		..	0	4	15	7		0	10	0	49	20	
11	Sunday ..	0	43	1	29	16	4	0	43	1	29	16	0	1	31	2	16	20	1
12	Monday..	2	15	2	55	17	11	2	15	2	55	17	5	2	58	3	38	23	4
13	Tuesday..	3	30	4	2	20	0	3	30	4	2	19	4	4	15	4	51	26	1
14	Wednesday	4	35	5	2	21	10	4	35	5	2	21	0	5	25	5	53	29	1
15	Thursday..	5	26	5	53	23	3	5	26	5	53	22	4	6	17	6	44	32	1
16	Friday ..	6	18	6	40	23	9	6	18	6	40	22	10	7	9	7	33	33	1
17	Saturday..	7	4	7	27	24	2	7	4	7	27	23	2	7	57	8	20	33	8
18	Sunday ..	7	48	8	9	23	8	7	48	8	9	22	9	8	41	9	1	33	0
19	Monday..	8	30	8	51	22	8	8	30	8	51	21	10	9	20	9	40	31	3
20	Tuesday..	9	12	9	32	21	2	9	12	9	32	20	5	9	59	10	17	28	9
21	Wednesday	9	54	10	16	19	3	9	54	10	16	18	8	10	36	10	55	25	8
22	Thursday..	10	38	11	5	17	5	10	38	11	5	17	0	11	16	11	42	22	8
23	Friday ..	11	32	..	15	8		11	32	..	15	5		..	0	13	19	9	
24	Saturday..	0	6	0	43	14	11	0	6	0	43	14	9	0	51	1	31	18	7
25	Sunday ..	1	24	2	9	15	3	1	24	2	9	15	1	2	11	2	53	19	2
26	Monday..	2	48	3	23	16	5	2	48	3	23	16	1	3	30	4	7	21	0
27	Tuesday..	3	50	4	13	17	11	3	50	4	13	17	5	4	37	5	2	23	4
28	Wednesday	4	37	4	58	19	1	4	37	4	58	18	6	5	27	5	49	25	4
29	Thursday..	5	19	5	36	20	1	5	19	5	36	19	5	6	10	6	27	27	1
30	Friday ..	5	54	6	12	20	5	5	54	6	12	19	9	6	45	7	4	27	8

The above are in Greenwich Mean Time, if local Time be required for
 Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.—Newport, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

New Moon .. 1st, 6h. 7m. a.m. | Last Quarter. 22nd, 6h. 54m. p.m.
 First Quarter. 9th, 5h. 50m. a.m. | New Moon ... 30th, 10h. 43m. p.m.
 Full Moon .. 15th, 9h. 9m. p.m.

WEEK DAYS.	Swansea.						Liverpool.				London.				Equation of Time.	Moon's Trans- sit.
	Morn.		Even.		Height	I.	Morn.		Even.		Morn.		Even.			
	H.	M.	H.	M.			H.	M.	H.	M.	H.	M.	H.	M.		
1 Thurs.	6	18	6	33	20	5	11	28	11	44	2	10	2	26	0 16	0a 3
2 Friday.	6	47	7	3	21	0	11	58	..	..	2	44	2	59	0 35	0 44
3 Satur..	7	19	7	33	21	2	0	14	0	30	3	13	3	28	0 54	1 27
4 Sunday	7	50	8	4	20	10	0	44	1	2	3	43	3	57	1 14	2 10
5 Mon ..	8	20	8	36	20	4	1	16	1	31	4	14	4	28	1 34	2 54
6 Tues ..	8	52	9	9	19	6	1	47	2	2	4	43	4	59	1 54	3 41
7 Wednes.	9	28	9	45	18	4	2	19	2	38	5	15	5	32	2 14	4 30
8 Thurs.	10	6	10	28	17	1	2	57	3	19	5	52	6	12	2 34	5 22
9 Friday	10	54	11	21	15	9	3	44	4	14	6	35	7	1	2 55	6 17
10 Satur..	11	54	..	..	15	2	4	50	5	32	7	31	8	6	3 15	7 12
11 Sunday	0	33	1	19	15	8	6	19	7	7	8	49	9	32	3 36	8 9
12 Mon ..	2	5	2	45	17	5	7	48	8	23	10	16	10	58	3 57	9 6
13 Tues ..	3	20	3	52	19	10	8	53	9	21	11	35	..	..	4 18	10 3
14 Wednes.	4	25	4	52	21	11	9	48	10	10	0	6	0	35	4 40	10 59
15 Thurs.	5	16	5	43	23	7	10	30	10	54	1	3	1	27	5 1	11 55
16 Friday.	6	8	6	30	24	2	11	18	11	41	1	48	2	11	5 22	morn
17 Satur..	6	54	7	17	24	7	..	..	0	5	2	34	2	56	5 43	0 50
18 Sunday	7	38	7	59	24	1	0	28	0	50	3	19	3	41	6 4	1 45
19 Mon ..	8	20	8	41	22	11	1	11	1	31	4	2	4	23	6 26	2 41
20 Tues ..	9	2	9	22	21	2	1	52	2	12	4	43	5	4	6 47	3 36
21 Wednes.	9	44	10	6	19	0	2	33	2	55	5	25	5	46	7 8	4 31
22 Thurs.	10	28	10	55	16	11	3	19	3	44	6	10	6	35	7 29	5 24
23 Friday.	11	22	11	56	14	11	4	16	4	52	7	1	7	33	7 49	6 15
24 Satur..	..	..	0	33	14	0	5	34	6	19	8	8	8	51	8 10	7 4
25 Sunday	1	14	1	59	14	5	7	2	7	43	9	32	10	12	8 31	7 51
26 Mon ..	2	38	3	13	15	9	8	16	8	47	10	53	11	28	8 51	8 36
27 Tues ..	3	40	4	3	17	5	9	10	9	30	..	0	0	0	9 11	9 19
28 Wednes.	4	27	4	48	18	9	9	50	10	7	0	24	0	44	9 31	10 1
29 Thurs.	5	9	5	26	19	11	10	25	10	39	1	5	1	24	9 50	10 43
30 Friday.	5	44	6	2	20	4	10	55	11	13	1	42	1	57	10 10	11 25

The above are in Greenwich Time, if local Mean Time be required for
 Swansea, *sub.* 15 m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 8th, 3h. 37m. p.m. | Last Quarter.. 22nd, 11h. 27m.
 Full Moon .. 15th, 6h. 15m. a.m. | New Moon .. 30th, 3h. 28m.

M. D.	WEEK DAYS.	Barnstaple.						Bridgwater.						Bristol.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Saturday..	5	42	5	56	26	9	7	39	7	54	14	6	7	19	7	34	2	
2	Sunday ..	6	12	6	29	27	0	8	11	8	27	14	9	7	51	8	7	2	
3	Monday..	6	45	7	2	26	11	8	43	9	0	14	8	8	23	8	40	2	
4	Tuesday..	7	18	7	33	26	6	9	16	9	30	14	2	8	56	9	10	2	
5	Wednesday	7	52	8	11	25	10	9	47	10	5	13	4	9	27	9	45	2	
6	Thursday.	8	31	8	53	25	0	10	22	10	42	12	3	10	2	10	22	2	
7	Friday ..	9	12	9	37	24	0	10	59	11	20	11	0	10	39	11	0	2	
8	Saturday .	10	2	10	31	23	1	11	44	..	9	11		11	24	11	54	2	
9	Sunday ..	11	3	11	40	22	7	0	14	0	51	9	3	..	0	31	2		
10	Monday..	..		0	22	22	10	1	31	2	15	9	7	1	11	1	55	2	
11	Tuesday..	1	8	1	46	24	1	2	58	3	34	11	2	2	38	3	14	2	
12	Wednesday	2	21	2	54	25	9	4	10	4	44	13	3	3	50	4	24	2	
13	Thursday.	3	23	3	50	27	4	5	17	5	45	15	2	4	57	5	25	2	
14	Friday ..	4	16	4	41	28	6	6	11	6	37	16	8	5	51	6	17	3	
15	Saturday..	5	6	5	31	28	11	7	3	7	27	17	2	6	43	7	7	3	
16	Sunday ..	5	54	6	19	29	2	7	52	8	17	17	6	7	32	7	57	3	
17	Monday..	6	41	7	2	28	9	8	39	9	0	17	0	8	19	8	40	3	
18	Tuesday..	7	23	7	42	27	10	9	20	9	39	15	10	9	0	9	19	3	
19	Wednesday	8	3	8	25	26	7	9	57	10	17	14	3	9	37	9	57	2	
20	Thursday.	8	48	9	9	25	1	10	37	10	57	12	5	10	17	10	37	2	
21	Friday ..	9	32	9	54	23	7	11	16	11	36	10	6	10	56	11	16	2	
22	Saturday..	10	20	10	48	22	2	..	0	2	8	9	11	11	42	..	19		
23	Sunday ..	11	20	11	54	21	4	0	34	1	10	7	7	0	14	0	50	1	
24	Monday..	..		0	30	21	5	1	46	2	23	7	9	1	26	2	3	1	
25	Tuesday..	1	11	1	48	22	2	3	1	3	36	8	9	2	41	3	16	1	
26	Wednesday	2	19	2	46	23	4	4	7	4	36	10	2	3	47	4	16	2	
27	Thursday.	2	11	3	32	24	6	5	3	5	27	11	8	4	43	5	7	2	
28	Friday ..	3	55	4	14	25	5	5	50	6	10	12	10	5	30	5	50	2	
29	Saturday..	4	34	4	52	26	3	6	30	6	49	13	10	6	10	6	29	2	
30	Sunday ..	5	12	5	30	26	6	7	9	7	26	14	2	6	49	7	6	2	
31	Monday..	5	46	6	2	26	10	7	44	8	0	14	7	7	24	7	41	2	

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m
 For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 8th, 3h. 37m. p.m. | Last Quarter. 22nd, 11h. 27m. a.m.
 Full Moon .. 15th, 6h. 15m. a.m. | New Moon ... 30th, 3h. 28m. p.m.

WEEK DAYS.	Cardiff.				Gloucester.				Ilfracombe.			
	Morn.		Even.		Height		Morn.		Even.		Height	
	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1 Saturday..	7	9	7	24	29	1	8	4	8	19	26	11
2 Sunday ..	7	41	7	57	29	6	8	36	8	52	27	5
3 Monday..	8	13	8	30	29	5	9	8	9	25	27	3
4 Tuesday..	8	46	9	0	28	9	9	41	9	55	26	5
5 Wednesday	9	17	9	35	27	8	10	12	10	30	25	1
6 Thursday..	9	52	10	12	26	5	10	47	11	7	23	6
7 Friday ..	10	29	10	50	24	10	11	24	11	45	21	6
8 Saturday..	11	14	11	44	23	5	..	0	9	19	9	10
9 Sunday ..	..	..	0	21	22	7	0	39	1	16	18	9
10 Monday..	1	1	1	45	23	0	1	56	2	40	19	3
11 Tuesday..	2	28	3	4	24	11	3	23	3	59	21	7
12 Wednesday	3	40	4	14	27	6	4	35	5	9	24	11
13 Thursday..	4	47	5	15	30	0	5	42	6	10	28	1
14 Friday ..	5	41	6	7	31	9	6	36	7	2	30	3
15 Saturday	6	33	6	57	32	6	7	28	7	52	31	1
16 Sunday ..	7	22	7	47	32	11	8	17	8	42	31	7
17 Monday..	8	9	8	30	32	2	9	4	9	25	30	9
18 Tuesday..	8	50	9	9	30	10	9	45	10	5	29	1
19 Wednesday	9	27	9	47	28	11	10	22	10	42	26	7
20 Thursday..	10	7	10	27	26	6	11	2	11	22	23	7
21 Friday ..	10	46	11	6	24	2	11	41	..	20	8	9
22 Saturday..	11	32	..	..	22	0	0	1	0	27	18	0
23 Sunday ..	0	4	0	40	20	7	0	59	1	35	16	3
24 Monday..	1	16	1	53	20	9	2	11	2	48	16	5
25 Tuesday..	2	31	3	6	22	0	3	26	4	1	18	0
26 Wednesday	3	37	4	6	23	9	4	32	5	1	20	3
27 Thursday	4	33	4	57	25	6	5	28	5	52	22	5
28 Friday ..	5	20	5	40	27	0	6	15	6	35	24	3
29 Saturday..	6	0	6	19	28	4	6	55	7	14	25	11
30 Sunday ..	6	39	6	56	28	9	7	34	7	51	26	5
31 Monday..	7	14	7	31	29	3	8	9	8	25	27	1

The above are in Greenwich Mean Time, if local Time be required for
 Cardiff, *sub.* 13m. —Glo'ster, *sub.* 10m.—Ilfracombe, *sub.* 16m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 8th, 3h. 37m. p.m. | Last Quarter. 22nd, 11h 27m a.m.
 Full Moon .. 15th, 6h. 15m. a.m. | New Moon .. 30th, 3h. 28m. p.m.

M. D.	WEEK DAYS.	Llanelly.						Milford Haven.						Newport.					
		Morn		Even		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Saturday..	6	27	6	41	21	0	6	27	6	41	20	3	7	19	7	34	28	5
2	Sunday ..	6	57	7	14	21	3	6	57	7	14	20	6	7	51	8	7	28	11
3	Monday..	7	30	7	47	21	2	7	30	7	47	20	5	8	23	8	40	28	9
4	Tuesday..	8	3	8	18	20	8	8	3	8	18	20	0	8	56	9	10	28	1
5	Wednesdy	8	37	8	56	20	0	8	37	8	56	19	4	9	27	9	45	26	11
6	Thursday..	9	16	9	38	19	1	9	16	9	38	18	6	10	2	10	22	25	4
7	Friday ..	9	57	10	22	18	0	9	57	10	22	17	6	10	39	11	0	23	6
8	Saturday ..	10	47	11	16	17	0	10	47	11	16	16	7	11	24	11	54	22	0
9	Sunday ..	11	48	..	16	5		11	48	..	16	1		..	0	31	21	0	
10	Monday..	0	25	1	7	16	8	0	25	1	7	16	4	1	11	1	55	21	6
11	Tuesday..	1	53	2	31	18	1	1	53	2	31	17	7	2	38	3	14	23	8
12	Wednesdy	3	6	3	39	19	11	3	6	3	39	19	3	3	50	4	24	26	9
13	Thursday..	4	8	4	35	21	7	4	8	4	35	20	10	4	57	5	25	29	7
14	Friday ..	5	1	5	26	22	11	5	1	5	26	22	0	5	51	6	17	31	6
15	Saturday..	5	51	6	16	23	4	5	51	6	16	22	5	6	43	7	7	32	4
16	Sunday ..	6	39	7	4	23	7	6	39	7	4	22	8	7	32	7	57	32	10
17	Monday..	7	26	7	47	23	2	7	26	7	47	22	3	8	19	8	40	32	0
18	Tuesday..	8	8	8	27	22	2	8	8	8	27	21	4	9	0	9	19	30	6
19	Wedneady	8	48	9	10	20	9	8	48	9	10	20	1	9	37	9	57	28	3
20	Thursday..	9	33	9	54	19	2	9	33	9	54	18	7	10	17	10	37	25	6
21	Friday ..	10	17	10	39	17	6	10	17	10	39	17	1	10	56	11	16	22	10
22	Saturday..	11	5	11	33	16	0	11	5	11	33	15	8	11	42	..	20	3	
23	Sunday ..	..	0	5	15	0		..	0	5	14	10		0	14	0	50	18	8
24	Monday..	0	39	1	15	15	1	0	39	1	15	14	11	1	26	2	3	18	10
25	Tuesday..	1	56	2	33	16	0	1	56	2	33	15	8	2	41	3	16	20	3
26	Wedneady	3	4	3	31	17	3	3	4	3	31	16	10	3	47	4	16	22	5
27	Thursday..	3	56	4	17	18	6	3	56	4	17	18	0	4	43	5	7	24	4
28	Friday ..	4	40	4	59	19	6	4	40	4	59	18	11	5	30	5	50	26	1
29	Saturday..	5	19	5	37	20	5	5	19	5	37	19	9	6	10	6	29	27	8
30	Sunday ..	5	57	6	15	20	8	5	57	6	15	20	0	6	49	7	6	28	1
31	Monday..	6	31	6	47	21	1	6	31	6	47	20	4	7	24	7	41	28	7

The above are in Greenwich Mean Time, if local Time be required for
 Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.—Newport, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 8th, 3h. 37m. p.m. | Last Quarter.. 22nd, 11h. 27m. a.m.
 Full Moon .. 16th, 6h. 16m. a.m. | New Moon .. 30th, 3h. 28m. p.m.

D	WEEK M. DAYS.	Swansea.				Liverpool.				London.				Equation of Time.	Moon's Trans- sit.			
		Morn.		Even.		Height	Morn.		Even.		Morn.		Even.					
		H.	M.	H.	M.		F.	I.	H.	M.	H.	M.	H.			M.	H.	M.
1	Satur...	6	17	6	31	21	0	11	27	11	42	2	12	2	29	10	29	0a 8
2	Sunday	6	47	7	4	21	3	11	58	..		2	43	2	57	10	47	0 53
3	Mon ..	7	20	7	37	21	2	0	15	0	31	3	13	3	29	11	6	1 39
4	Tues ..	7	53	8	8	20	8	0	49	1	5	3	44	4	1	11	24	2 28
5	Wednes	8	27	8	46	19	10	1	20	1	38	4	17	4	32	11	41	3 19
6	Thurs..	9	0	9	28	18	9	1	56	2	16	4	50	5	9	11	59	4 11
7	Friday.	9	47	10	12	17	6	2	38	2	59	5	29	5	52	12	16	5 5
8	Satur...	10	37	11	6	16	5	3	26	3	54	6	14	6	42	12	32	6 0
9	Sunday	11	38	..		15	9	4	30	5	12	7	11	7	47	12	48	6 55
10	Mon ..	0	15	0	57	16	1	5	57	6	46	8	28	9	13	13	4	7 50
11	Tues ..	1	43	2	21	17	8	7	29	8	2	9	56	10	38	13	19	8 44
12	Wednes	2	56	3	29	19	9	8	32	9	1	11	13	11	45	13	34	9 38
13	Thurs..	3	58	4	25	21	8	9	26	9	48	..		0	14	13	48	10 38
14	Friday.	4	51	5	16	23	2	10	9	10	30	0	49	1	3	14	2	11 28
15	Satur...	5	41	6	6	23	8	10	53	11	16	1	26	1	48	14	15	morn.
16	Sunday	6	29	6	54	24	0	11	40	..		2	10	2	32	14	28	0 24
17	Mon ..	7	16	7	37	23	6	0	5	0	27	2	55	3	19	14	40	1 20
18	Tues ..	7	58	8	17	22	4	0	49	1	10	3	40	4	1	14	51	2 17
19	Wednes	8	38	9	0	20	9	1	29	1	50	4	22	4	41	15	2	3 12
20	Thurs..	9	23	9	44	18	11	2	10	2	33	5	1	5	23	15	12	4 6
21	Friday.	10	7	10	29	17	0	2	56	3	20	5	46	6	11	15	22	4 57
22	Satur...	10	55	11	23	15	3	3	45	4	16	6	36	7	2	15	31	5 46
23	Sunday	11	55	..		14	1	4	53	5	33	7	33	8	9	15	39	6 32
24	Mon ..	0	29	1	5	14	3	6	14	6	54	8	50	9	28	15	46	7 16
25	Tues ..	1	46	2	23	15	3	7	32	8	3	10	4	10	41	15	53	7 58
26	Wednes	2	54	3	21	16	8	8	30	8	54	11	15	11	43	15	59	8 10
27	Thurs..	3	46	4	7	18	2	8	15	9	33	..		0	7	16	4	9 22
28	Friday.	4	30	4	49	19	4	9	52	10	8	0	29	0	48	16	8	10 5
29	Satur...	5	9	5	27	20	4	10	25	10	40	1	7	1	25	16	12	10 49
30	Sunday	5	47	6	5	20	8	11	0	11	15	1	42	1	58	16	14	11 36
31	Mon ..	6	21	6	37	21	1	11	31	11	48	2	15	2	31	16	16	0a24

Add to Mean Time. — Subtract from Apparent Time.

The above are in Greenwich Time, if local Mean Time be required for
 Swansea, *sub.* 15 m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 6th, 11h. 52m. p.m. | Last Quarter. 21st, 7h. 11m. p.m.
 Full Moon .. 13th, 5h. 33m. p.m. | New Moon .. 29th, 7h. 11m. p.m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgwater.					Bristol.		
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.
		H.	M.	H.	M.	F.	H.	M.	H.	M.	F.	H.	M.	H.
1	Tuesday..	6	21	6	39	26 11	8	19	8	37	14 8	7	59	8
2	Wednesday	6	57	6	15	26 9	8	55	9	13	14 6	8	35	8
3	Thursday	7	35	7	54	26 3	9	32	9	49	13 10	9	12	9
4	Friday ..	8	16	8	39	25 7	10	9	10	29	13 0	9	49	10
5	Saturday..	9	0	9	26	24 9	10	49	11	11	12 0	10	29	10
6	Sunday ..	9	50	10	19	23 10	11	33	12	0	10 10	11	13	11
7	Monday..	10	49	11	21	23 2	..	0	35	10 0	..	..	0	..
8	Tuesday..	11	57	..	..	23 3	1	11	1	50	10 1	0	51	1
9	Wednesday	0	35	1	17	24 2	2	27	3	6	11 3	2	7	2
10	Thursday..	1	54	2	26	25 6	3	41	4	14	12 11	3	21	3
11	Friday ..	2	56	3	24	26 8	4	47	5	18	14 4	4	27	4
12	Saturday..	3	55	4	20	27 7	5	50	6	16	15 6	5	30	5
13	Sunday ..	4	48	5	15	28 1	6	44	7	11	16 2	6	24	6
14	Monday..	5	37	6	0	28 3	7	34	7	58	16 4	7	14	7
15	Tuesday..	6	21	6	43	28 1	8	19	8	41	16 2	7	59	8
16	Wednesday	7	3	7	24	27 4	9	1	9	21	15 2	8	41	9
17	Thursday..	7	43	8	5	26 6	9	40	9	59	14 2	9	20	9
18	Friday ..	8	27	8	48	25 4	10	19	10	38	12 8	9	59	10
19	Saturday..	9	8	9	27	24 1	10	55	11	12	11 2	10	35	10
20	Sunday ..	9	47	10	10	23 0	11	30	11	52	9 9	11	10	11
21	Monday..	10	35	11	3	22 0	..	0	19	8 6	11	59	..	..
22	Tuesday..	11	29	12	0	21 7	0	51	1	20	7 11	0	31	1
23	Wednesday	..	..	0	34	21 9	1	53	2	26	8 2	1	33	2
24	Thursday..	1	8	1	45	22 5	2	58	3	33	9 1	2	38	3
25	Friday ..	2	16	2	45	23 5	4	4	4	35	10 4	3	44	4
26	Saturday..	3	9	3	35	24 7	5	2	5	29	11 9	4	42	5
27	Sunday ..	3	57	4	18	25 6	5	52	6	14	12 11	5	32	5
28	Monday..	4	41	5	2	26 4	6	37	6	58	13 11	6	17	6
29	Tuesday..	5	25	5	45	26 7	7	22	7	42	14 3	7	2	7
30	Wednesday	6	3	6	23	27 1	8	2	8	21	14 11	7	42	8

The above are in Greenwich Mean Time, if local Time be required
 Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 11m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 6th, 11h. 52m. p.m. | Last Quarter.. 21st, 7h. 16m. a.m.
 Full Moon .. 13th, 5h. 33m. p.m. | New Moon .. 29th, 7h. 17m. a.m.

WEEK DAYS	Cardiff.				Gloucester.				Ilfracombe.			
	Morn.	Even.	Height		Morn.	Even.	Height		Morn.	Even.	Height	
	H. M.	H. M.	F. I.		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.	
1 Tuesday..	7 49	8 7	29 5		8 44	9 2	27 3		6 31	6 49	20 8	
2 Wednesday	8 25	8 43	29 1		9 20	9 38	26 11		7 7	6 25	20 6	
3 Thursday..	9 2	9 19	28 4		9 57	10 14	25 11		7 45	8 4	19 11	
4 Friday ..	9 39	9 59	27 3		10 34	10 54	24 7		8 26	8 49	19 2	
5 Saturday..	10 19	10 41	26 0		11 14	11 36	23 0		9 11	9 36	18 4	
6 Sunday ..	11 3	11 30	24 6		11 58	..	21 2		10 1	10 29	17 4	
7 Monday..	..	0 5	23 6		0 25	1 0	19 11		10 59	11 31	16 7	
8 Tuesday..	0 41	1 20	23 8		1 36	2 15	20 1		..	0 7	16 8	
9 Wednesday	1 57	2 36	25 0		2 52	3 31	21 9		0 45	1 27	17 8	
10 Thursday.	3 11	3 44	27 2		4 6	4 39	24 5		2 4	2 36	19 1	
11 Friday ..	4 17	4 48	29 0		5 12	5 43	26 9		3 6	3 34	20 4	
12 Saturday..	5 20	5 46	30 6		6 15	6 41	28 7		4 5	4 30	21 5	
13 Sunday ..	6 14	6 41	31 3		7 9	7 36	29 7		4 58	5 25	21 11	
14 Monday..	7 4	7 28	31 5		7 59	8 23	29 9		5 47	6 9	22 1	
15 Tuesday..	7 49	8 11	31 3		9 44	9 6	29 7		6 31	6 53	21 11	
16 Wednesday	8 31	8 51	30 0		9 26	9 46	28 1		7 13	7 34	21 1	
17 Thursday.	9 10	9 29	28 9		10 5	10 24	26 5		7 53	8 15	20 2	
18 Friday ..	9 49	10 8	26 11		10 44	11 3	24 1		8 37	8 58	18 11	
19 Saturday..	10 25	10 42	24 11		11 20	11 37	21 7		9 18	9 37	17 7	
20 Sunday ..	11 0	11 22	23 3		11 55	..	19 7		9 57	10 20	16 4	
21 Monday..	11 49	..	21 8		0 17	0 44	17 7		10 45	11 13	15 3	
22 Tuesday..	0 21	0 50	21 0		1 16	1 45	16 9		11 39	..	14 9	
23 Wednesday	1 23	1 56	21 3		2 18	2 51	17 1		0 10	0 44	15 0	
24 Thursday.	2 28	3 3	22 4		3 23	5 58	18 5		1 18	1 55	15 9	
25 Friday ..	3 34	4 5	23 11		4 29	5 0	20 5		2 26	2 55	16 10	
26 Saturday..	4 32	4 59	25 8		5 27	5 54	22 7		3 19	3 45	18 1	
27 Sunday ..	5 22	5 44	27 2		6 17	6 39	24 5		4 7	4 28	19 1	
28 Monday..	6 7	6 28	28 6		7 2	7 23	26 1		4 51	5 12	20 0	
29 Tuesday..	6 52	7 12	28 11		7 47	8 7	26 7		5 35	5 55	20 3	
30 Wednesday	7 32	7 51	29 8		8 27	8 46	27 7		6 13	6 33	20 10	

The above are in Greenwich Mean Time, if local Time be required for
 Cardiff, *sub* 13m.—Gloucester, *sub* 10m.—Ilfracombe, *sub* 16m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 6th, 11h. 52m. p.m. | Last Quarter. 21st, 7h. 16m. a.
 Full Moon .. 13th, 6h. 33m. p.m. | New Moon .. 29th, 7h. 17m. a.

M. D.	WEEK DAYS.	Llanelly.					Milford Haven.					Newport.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Tuesday..	7	6	7	24	21	2	7	6	7	24	20	5	7	59	8	17	22	2
2	Wednesday	7	42	8	0	20	0	7	42	8	0	20	3	8	35	8	53	22	2
3	Thursday..	8	20	8	39	20	5	8	20	8	39	19	9	9	12	9	29	22	2
4	Friday ..	9	1	9	24	19	8	9	1	9	24	19	1	9	49	10	9	22	2
5	Saturday..	9	46	10	11	18	10	9	46	10	11	18	3	10	29	10	51	22	2
6	Sunday ..	10	36	11	4	17	10	10	36	11	4	17	4	11	13	11	40	22	2
7	Monday..	11	34	..	17	1	11	11	34	..	16	8	..	0	15	12	15	22	2
8	Tuesday..	0	6	0	42	17	2	0	6	0	42	16	9	0	51	1	30	22	2
9	Wednesday	1	20	2	2	18	2	1	20	2	2	17	8	2	7	2	46	22	2
10	Thursday..	2	39	3	11	19	7	2	39	3	11	19	0	3	21	3	54	22	2
11	Friday ..	3	41	4	9	20	10	3	41	4	9	20	2	4	27	4	58	22	2
12	Saturday..	4	40	5	5	21	11	4	40	5	5	21	1	5	30	5	56	22	2
13	Sunday ..	5	33	6	0	22	5	5	33	6	0	21	7	6	24	6	51	22	2
14	Monday..	6	22	6	44	22	7	6	22	6	44	21	9	7	14	7	38	22	2
15	Tuesday..	7	6	7	28	22	5	7	6	7	28	21	7	7	59	8	21	22	2
16	Wednesday	7	48	8	9	21	7	7	48	8	9	20	10	8	41	9	1	22	2
17	Thursday..	8	28	8	50	20	8	8	28	8	50	20	0	9	20	9	39	22	2
18	Friday ..	2	12	9	33	19	5	9	12	9	33	18	10	9	59	10	18	22	2
19	Saturday..	9	53	10	12	18	1	9	53	10	12	17	7	10	35	10	52	22	2
20	Sunday ..	10	32	10	55	16	10	10	32	10	55	16	6	11	10	11	32	22	2
21	Monday..	11	20	11	48	15	9	11	20	11	48	15	6	11	59	..	19	22	2
22	Tuesday..	..	0	14	15	3	..	..	0	14	15	1	0	31	1	0	19	22	2
23	Wednesday	0	45	1	19	15	6	0	45	1	19	15	3	1	38	2	6	19	22
24	Thursday..	1	53	2	30	16	3	1	53	2	30	15	11	2	38	3	13	20	22
25	Friday ..	3	1	3	30	17	4	3	1	3	30	16	11	3	44	4	15	22	22
26	Saturday..	3	54	4	20	18	7	3	54	4	20	18	1	4	42	5	9	24	22
27	Sunday ..	4	42	5	3	19	7	4	42	5	3	19	0	5	32	5	54	26	22
28	Monday..	5	26	5	47	20	6	5	26	5	47	19	10	6	17	6	38	27	22
29	Tuesday..	6	10	6	30	20	9	6	10	6	30	20	1	7	2	7	22	28	22
30	Wednesday	6	48	7	8	21	4	6	48	7	8	20	7	7	42	8	1	29	22

The above are in Greenwich Mean Time, if local Time be required for
 Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.—Newport, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 6th, 11h. 52m. p.m. | Last Quarter.. 21st, 7h. 16m. a.m.
 Full Moon .. 13th, 5h. 33m. p.m. | New Moon .. 29th, 7h. 17m. a.m.

M. D.	WEEK DAYS.	Swansea.					Liverpool.				London.				Equation of Time.	Moon's Transit.
		Morn.		Even.		Height	Morn.		Even.		Morn.		Even.			
		H.	M.	H.	M.		H.	M.	H.	M.	H.	M.	H.	M.		
1	Tues ..	6	56	7	14	21	2	..	0	7	2	47	3	3	16 18	1a15
2	Wednes	7	32	6	50	21	0	0	25	0	43	3	21	3	16 18	2 8
3	Thurs..	8	10	8	29	20	4	1	2	1	22	3	56	4	16 18	3 2
4	Friday.	8	51	9	14	19	6	1	40	2	0	4	34	4	16 17	3 56
5	Satur..	9	36	10	1	18	6	2	24	2	46	5	14	5	16 15	4 50
6	Sunday	10	26	10	54	17	4	3	14	3	41	6	1	6	16 12	5 44
7	Mon ..	11	24	11	56	16	6	4	14	4	54	6	58	7	16 8	6 36
8	Tues ..	..	0	32	16	7	5	5	34	6	18	8	10	8	16 4	7 29
9	Wednes	1	10	1	52	17	9	6	58	7	36	9	31	10	15 59	8 21
10	Thurs..	2	29	3	1	19	5	8	8	8	36	10	46	11	15 52	9 14
11	Friday.	3	31	3	59	20	10	9	3	9	27	11	49	..	15 46	10 8
12	Satur..	4	30	4	55	22	0	9	52	10	13	0	16	0	15 38	11 4
13	Sunday	5	23	5	50	22	8	10	36	11	1	1	7	1	15 29	12 0
14	Mon ..	6	12	6	34	22	10	11	22	11	45	1	54	2	15 20	morn.
15	Tues ..	6	56	7	18	22	8	..	0	7	2	38	3	0	15 9	0 57
16	Wednes	7	38	7	59	21	8	0	29	0	50	3	21	3	14 58	1 52
17	Thurs..	8	18	8	40	20	8	1	11	1	30	4	2	4	14 46	2 46
18	Friday.	9	2	9	23	19	2	1	51	2	12	4	42	5	14 33	3 37
19	Satur..	9	43	10	2	17	8	2	34	2	54	5	25	5	14 20	4 25
20	Sunday	10	22	10	45	16	3	3	15	3	37	6	9	6	14 5	5 10
21	Mon ..	11	10	11	38	15	0	4	4	4	35	6	54	7	13 50	5 54
22	Tues ..	..	0	4	14	5	5	5	12	5	44	7	52	8	13 34	6 36
23	Wednes	0	35	1	9	14	8	6	21	6	57	9	1	9	13 17	7 18
24	Thurs..	1	43	2	20	15	7	7	29	8	1	10	7	10	12 59	8 0
25	Friday.	2	51	3	20	16	10	8	28	8	53	11	12	11	12 41	8 44
26	Satur..	3	44	4	10	18	3	9	14	9	35	..	0	6	12 21	9 29
27	Sunday	4	32	4	53	19	5	9	53	10	11	0	28	0	12 1	10 17
28	Mon ..	5	16	5	37	20	5	10	30	10	49	1	9	1	11 41	11 7
29	Tues ..	6	0	6	20	20	9	11	11	11	30	1	48	2	11 19	12 0
30	Wednes	6	38	6	58	21	5	11	49	..	..	2	27	2	10 57	0a55

The above are in Greenwich Mean Time, if local Time be required for
 Swansea, sub. 15m.—Liverpool, sub. 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 6th, 7h. 33m. a.m. | Last Quarter.. 21st, 5h. 2m. a.m.
 Full Moon .. 13th, 7h. 12m. a.m. | New Moon .. 28th, 9h. 21m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgwater.				Bristol.			
		Morn.	Even.	Height		Morn.	Even.	Height		Morn.	Even.	Height	
		H. M.	H. M. F.	I.		H. M.	H. M. F.	I.		H. M.	H. M. F.	I.	
1	Thursday.	6 44	7 4 27	3		8 42	9 4 15	1		8 22	8 44 29	2	
2	Friday ..	7 25	7 46 27	0		9 22	9 41 14	9		9 2	9 21 28	8	
3	Saturday..	8 9	8 32 26	6		10 3	10 23 14	2		9 43	10 3 27	10	
4	Sunday ..	8 56	9 18 25	10		10 45	11 4 13	4		10 25	10 44 26	6	
5	Monday..	9 43	10 5 25	0		11 26	11 49 12	3		11 6	11 29 25	0	
6	Tuesday..	10 31	11 0 24	2		..	0 15 11	3		11 55	.. 23	5	
7	Wednesday	11 29	.. 23	6		0 47	1 20 10	5		0 27	1 0 22	3	
8	Thursday.	0 2	0 42 23	7		1 55	2 34 10	6		1 35	2 14 22	5	
9	Friday ..	1 19	1 58 24	4		3 8	3 45 11	5		2 48	3 25 23	9	
10	Saturday..	2 30	3 4 25	4		4 19	4 56 12	8		3 59	4 36 25	8	
11	Sunday ..	3 32	4 4 26	3		5 27	6 0 13	10		5 7	5 40 27	4	
12	Monday..	4 12	4 39 26	10		6 28	6 54 14	7		6 8	6 34 23	4	
13	Tuesday..	5 24	5 46 27	1		7 21	7 44 14	11		7 1	7 24 28	10	
14	Wednesday	6 8	6 29 27	4		8 7	8 27 15	2		7 47	8 7 29	4	
15	Thursday.	6 49	7 10 27	2		8 47	9 8 15	0		8 27	8 48 29	0	
16	Friday ..	7 27	7 46 26	7		9 24	9 41 14	3		9 4	9 21 28	0	
17	Saturday..	8 5	8 25 26	0		9 59	10 16 13	6		9 39	9 56 26	10	
18	Sunday ..	8 45	9 1 25	1		10 34	10 50 12	5		10 14	10 30 25	2	
19	Monday..	9 19	9 37 24	2		11 5	11 20 11	3		10 45	11 0 23	5	
20	Tuesday..	9 56	10 14 23	3		11 38	11 56 10	1		11 18	11 36 21	10	
21	Wednesday	10 36	10 59 22	4		..	0 20 8	11		12 0	.. 20	2	
22	Thursday.	11 27	11 57 21	8		0 46	1 17 8	0		0 26	0 57 18	10	
23	Friday ..	..	0 30 21	8		1 50	2 23 8	0		1 30	2 3 18	10	
24	Saturday.	1 6	1 43 22	2		2 56	3 31 8	9		2 36	3 11 19	11	
25	Sunday ..	2 17	2 51 23	3		4 5	4 42 10	1		3 45	4 22 21	10	
26	Monday..	3 19	3 44 24	7		5 12	5 39 11	9		4 52	5 19 24	2	
27	Tuesday..	4 10	4 36 25	10		6 6	6 32 13	4		5 46	6 12 26	6	
28	Wednesday	5 2	5 26 26	4		6 58	7 23 13	18		6 38	7 3 27	6	
29	Thursday.	5 48	6 9 26	10		7 46	8 8 14	7		7 26	7 48 28	4	
30	Friday ..	6 32	6 53 27	10		8 30	8 51 15	10		8 10	8 31 30	3	
31	Saturday..	7 16	7 38 28	0		9 14	9 35 16	0		8 54	9 15 30	6	

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 6th, 7h. 33m. a.m. | Last Quarter. 21st, 5h. 2m. a.m.
 Full Moon .. 13th, 7h. 12m. a.m. | New Moon .. 28th, 9h. 21m. p.m.

M. D.	WEEK DAYS.	Cardiff.						Gloucester.						Ilfracombe.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday.	8	12	8	34	29	11	9	7	9	29	27	11	6	54	7	14	21	0
2	Friday ..	8	52	9	11	29	6	9	47	10	6	27	5	7	35	7	56	20	9
3	Saturday..	9	33	9	53	28	9	10	28	10	48	26	5	8	19	8	42	20	2
4	Sunday ..	10	15	10	34	27	8	11	10	11	29	25	1	9	6	9	28	19	6
5	Monday..	10	56	11	19	26	5	11	51	..	23	6	9	53	10	15	18	7	
6	Tuesday..	11	45	..	..	25	0	0	14	0	40	21	9	10	41	11	10	17	8
7	Wednesday	0	17	0	50	24	0	1	12	1	45	20	6	11	39	..	16	11	
8	Thursday.	1	25	2	4	24	2	2	20	2	59	20	8	0	12	0	52	17	0
9	Friday ..	2	38	3	15	25	3	3	33	4	10	22	1	1	29	2	8	17	10
10	Saturday..	3	49	4	26	26	11	4	44	5	21	24	1	2	40	3	14	18	11
11	Sunday ..	4	57	5	30	28	4	5	52	6	25	25	11	3	42	4	14	19	11
12	Monday..	5	58	6	24	29	3	6	53	7	19	27	1	4	22	4	49	20	7
13	Tuesday..	6	51	7	14	29	8	7	46	8	9	27	7	5	34	5	56	20	10
14	Wednesday	7	37	7	57	30	0	8	32	8	52	28	1	6	18	6	39	21	1
15	Thursday.	8	17	8	38	29	9	9	12	9	33	27	9	6	59	7	20	20	11
16	Friday ..	8	54	9	11	28	11	9	49	10	6	26	7	7	37	7	56	20	3
17	Saturday..	9	29	9	46	28	0	10	24	10	41	25	5	8	15	8	35	19	8
18	Sunday ..	10	4	10	20	26	6	10	59	11	15	23	7	8	55	9	11	18	8
19	Monday..	10	35	10	50	25	0	11	30	11	45	21	9	9	29	9	47	17	8
20	Tuesday..	11	8	11	26	23	8	..	0	3	20	1	10	6	10	24	16	8	
21	Wednesday	11	50	..	..	22	8	0	21	0	45	18	4	10	46	11	9	15	8
22	Thursday.	0	16	0	47	21	1	1	12	1	42	16	11	11	37	..	14	10	
23	Friday ..	1	20	1	53	21	1	2	15	2	48	16	11	0	7	0	40	14	10
24	Saturday.	2	26	3	1	22	0	3	21	3	56	18	0	1	16	1	53	15	6
25	Sunday ..	3	35	4	12	23	8	4	30	5	7	20	1	2	27	3	1	16	8
26	Monday..	4	42	5	9	25	8	5	37	6	4	22	7	3	29	3	54	18	1
27	Tuesday..	5	36	6	2	27	8	6	31	6	57	25	1	4	20	4	46	19	6
28	Wednesday	6	28	6	53	28	6	7	23	7	48	26	1	5	12	5	36	20	0
29	Thursday.	7	16	7	38	29	3	8	11	8	33	27	1	5	58	6	19	20	7
30	Friday ..	8	0	8	21	30	10	8	55	9	16	29	1	6	42	7	3	21	8
31	Saturday..	8	44	9	5	31	1	9	39	10	0	29	5	7	26	7	48	21	10

The above are in Greenwich Mean Time, if local Time be required for
 Cardiff, *sub.* 13m. —Glo'ster, *sub.* 10m.—Ilfracombe, *sub.* 16m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 6th, 7h. 33m. a.m. | Last Quarter.. 21st, 5h. 2m. a.m.
 Full Moon .. 13th, 7h. 12m. a.m. | New Moon .. 28th, 9h. 21m. p.m.

M. D.	WEEK DAYS.	Llanelly.					Milford Haven.					Newport.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday.	7	29	7	49	21	6	7	29	7	49	20	9	8	22	8	44	29	5
2	Friday ..	8	10	8	31	21	3	8	10	8	31	20	6	9	2	9	21	28	11
3	Saturday..	8	54	9	17	20	8	8	54	9	17	20	0	9	43	10	3	28	1
4	Sunday ..	9	41	10	3	20	0	9	41	10	3	19	4	10	25	10	44	26	11
5	Monday..	10	28	10	50	19	1	10	28	10	50	18	6	11	6	11	29	25	4
6	Tuesday..	11	16	11	45	18	2	11	16	11	45	17	8	11	55	..	23	9	
7	Wednesday	..		0	14	17	5	..		0	14	17	0	0	27	1	0	22	8
8	Thursday.	0	47	1	27	17	6	0	47	1	27	17	1	1	35	2	14	22	10
9	Friday ..	2	4	2	43	18	4	2	4	2	43	17	10	2	48	3	25	24	0
10	Saturday..	3	15	3	49	19	5	3	15	3	49	18	10	3	59	4	36	26	0
11	Sunday ..	4	17	4	50	20	5	4	17	4	50	19	9	5	7	5	40	27	8
12	Monday..	4	57	5	24	21	1	4	57	5	24	20	4	6	8	6	34	28	7
13	Tuesday..	6	9	6	31	21	4	6	9	6	31	20	7	7	1	7	24	29	1
14	Wednesday	6	53	7	14	21	7	6	53	7	14	20	10	7	47	8	7	29	7
15	Thursday.	7	34	7	55	21	5	7	34	7	55	20	8	8	27	8	48	29	3
16	Friday ..	8	12	8	31	20	9	8	12	8	31	20	1	9	4	9	21	28	3
17	Saturday..	8	50	9	9	20	2	8	50	9	9	19	6	9	39	9	56	27	3
18	Sunday ..	9	30	9	46	19	2	9	30	9	46	18	7	10	14	10	30	25	6
19	Monday..	10	4	10	22	18	2	10	4	10	22	17	8	10	45	11	0	23	9
20	Tuesday..	10	41	10	59	17	2	10	41	10	59	16	9	11	18	11	36	22	3
21	Wednesday	11	21	11	44	16	2	11	21	11	44	15	10	12	0	..	20	7	
22	Thursday.	..		0	12	15	4	..		0	12	15	2	0	26	0	57	19	3
23	Friday ..	0	42	1	15	15	4	0	42	1	15	15	2	1	30	2	3	19	3
24	Saturday..	1	51	2	28	16	0	1	51	2	28	15	8	2	36	3	11	20	3
25	Sunday ..	3	2	3	36	17	2	3	2	3	36	16	9	3	45	4	22	22	3
26	Monday..	4	4	4	29	18	7	4	4	4	29	18	1	4	52	5	19	24	6
27	Tuesday..	4	55	5	21	20	0	4	55	5	21	19	4	5	46	6	12	26	11
28	Wednesday	5	47	6	11	20	6	5	47	6	11	19	10	6	38	7	3	27	10
29	Thursday.	6	33	6	54	21	1	6	33	6	54	20	4	7	26	7	48	28	7
30	Friday ..	7	17	7	38	22	2	7	17	7	38	21	4	8	10	8	31	30	6
31	Saturday..	8	1	8	23	22	4	8	1	8	23	21	6	8	54	9	15	30	9

The above are in Greenwich Mean Time, if local Time be required for
 Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.—Newport, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 6th, 7h. 33m. a.m. | Last Quarter.. 21st, 5h. 2m. a.m.
 Full Moon .. 13th, 7h. 12m. a.m. | New Moon .. 28th, 9h. 21m. p.m.

WEEK DAYS.	Swansea.						Liverpool.				London.				Equation of Time.	Moon's Trans- sit.			
	Morn.		Even.		Height		Morn.		Even.		Morn.		Even.						
	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.	H.	M.	M.	S.	H.	M.	
1 Thurs..	7	19	7	39	21	7	0	9	0	30	3	4	3	23	10	34	1	51	
2 Friday..	8	0	8	21	21	3	0	51	1	12	3	43	4	3	10	11	2	46	
3 Satur..	8	44	9	7	20	8	1	32	1	54	4	24	4	44	9	47	3	41	
4 Sunday	9	31	9	53	19	10	2	17	2	42	5	7	5	30	9	22	4	34	
5 Mon ..	10	18	10	40	18	9	3	5	3	33	5	56	6	21	8	57	5	25	
6 Tues ..	11	6	11	35	17	9	4	0	4	31	6	49	7	17	8	32	6	17	
7 Wednes	..	..	0	4	16	11	5	8	5	44	7	48	8	24	8	6	7	8
8 Thurs..	0	37	1	17	17	0	6	24	7	4	9	1	9	36	7	39	8	0	
9 Friday..	1	54	2	33	17	11	7	38	8	12	10	14	10	48	7	12	8	53	
10 Satur..	3	5	3	39	19	2	8	40	9	9	11	24	11	53	6	45	9	47	
11 Sunday	4	7	4	40	20	4	9	33	10	0	..	0	23	6	17	Add to Mean Time.	10	43	
12 Mon ..	4	47	5	14	21	1	10	23	10	47	0	48	1	16	5	49	11	38	
13 Tues ..	5	59	6	21	21	5	11	10	11	31	1	40	2	4	5	21	morn.		
14 Wednes	6	43	7	4	21	8	11	54	..	..	2	26	2	47	4	52	0	33
15 Thurs..	7	24	7	45	21	6	0	15	0	35	3	9	3	29	4	23	1	25	
16 Friday..	8	2	8	21	20	9	0	57	1	14	3	48	4	9	3	54	2	15	
17 Satur..	8	40	9	0	20	0	1	32	1	51	4	26	4	44	3	24	3	3	
18 Sunday	9	20	9	36	18	11	2	9	2	30	5	3	5	22	2	55	3	48	
19 Mon ..	9	54	10	12	17	9	2	47	3	6	5	43	6	2	2	25	4	31	
20 Tues ..	10	31	10	49	16	7	3	26	3	47	6	22	6	42	1	55	5	13	
21 Wednes	11	11	11	34	15	5	4	8	4	36	7	4	7	25	1	25	5	55	
22 Thurs..	..	..	0	2	14	6	5	7	5	41	7	53	8	23	0	55	6	37
23 Friday..	0	32	1	5	14	6	6	18	6	54	8	58	9	31	0	25	7	21	
24 Satur..	1	41	2	18	15	3	7	27	7	59	10	4	10	36	0	4	8	7	
25 Sunday	2	52	3	26	16	7	8	29	9	0	11	10	11	41	0	34	Sub. from Mean	8	56
26 Mon ..	3	54	4	19	18	3	9	22	9	43	..	0	12	1	4	9	48		
27 Tues ..	4	45	5	11	19	10	10	5	10	26	0	36	0	58	1	34	10	42	
28 Wednes	5	37	6	1	20	5	10	49	11	12	1	21	1	44	2	3	11	39	
29 Thurs..	6	23	6	44	21	1	11	33	11	55	2	6	2	28	2	33	0	36	
30 Friday..	7	7	7	28	22	4	..	0	18	2	49	3	10	3	2	1	32		
31 Satur..	7	51	8	13	22	6	0	39	1	0	3	32	3	52	3	31	2	28	

Add to Mean Time.

Sub. from Mean

The above are in Greenwich Mean Time, if local Time be required for
 Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PORT CHARGES, &c.

APPLEDORE.

Mooring, 1s.

Pilotage, as per agreement.

BARNSTAPLE.

Keelage, 4d. per ton register.

Pilotage, as per agreement.

BIDEFORD.

Harbour Dues.—Vessels discharging at public quay, $\frac{1}{2}$ d. per ton register, at private wharf, 2s. 6d.

Pilotage, as per agreement.

BRIDGWATER.

Pilotage.

From the extreme limits of the navigation in the Bristol Channel, or from any point between such extreme limits and Burnham Church, to the Town or to any point between the Black Rock and the Town, the vessel being safely moored;—also from the Town to the limits of the navigation, or to any point between Burnham Church and the said limits, the following Rates, viz. :—

			£	s.	d.
On vessels of 30 tons and under	.....		0	6	6
On vessels above 30 tons and under 50 tons.			0	8	0
„ 50	„ 65	....	0	10	0
„ 65	„ 80	....	0	12	6
„ 80	„ 100	....	0	15	0
„ 100	„ 120	....	1	0	0
„ 120	„ 150	....	1	11	0
„ 150	„ 200	....	2	11	0
„ 200	„ 300	....	3	6	0
„ 300	„	.....	4	1	0

Bridgwater, continued.

From Burnham Church, or from any point between Burnham Church and the Town, to the Town, or to any intermediate point, the vessel being safely moored, and *vice versa*.

		£	s.	d.
On vessels of 30 tons and under		0	4	6
On vessels above 30 tons and under 50 tons.		0	5	6
" 50 "	65	0	6	6
" 65 "	80	0	7	6
" 80 "	100	0	8	6
" 100 "	120	0	10	6
" 120 "	150	1	6	0
" 150 "	200	2	1	0
" 200 "	300	2	11	0
" 300 "	.....	3	4	0

The above Rates are subject to a reduction of one-fourth part in respect of vessels towed by steam vessels.

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first-mentioned ships shall, by any order of Her Majesty's Most Honourable Privy Council be privileged to enter the ports of this kingdom, upon paying the same Dues of Tonnage as are paid by British ships; in which case, such ships and vessels not having British registers, shall pay the like Rates of Pilotage only, as are payable by ships having British registers.

If a master choose to employ a pilot for a tide in the navigation, the pilot shall be entitled to receive for such service, two shillings and sixpence for each tide.

Towage.

To or from Burnham, Black Rock, or any intermediate Place, where a vessel shall stop or get aground (*for one tide only*;) viz;—
Vessels—Light, under one hundred tons register, 3d. per ton; ditto above, 4d. per ton. (If any goods, 1d. per ton extra.)

Vessels with coal or culm, under 10 feet of water, 3d. per ton; 10 feet, 4d. per ton; 12 feet, 5d. per ton.

Vessels with merchandize, or ballast, 4d. per ton; 10 feet of water, 5d. per ton; 11 feet, 6d. per ton; 12 feet, 7d. per ton.

To or from the Gore to Burnham, or any intermediate place, 3d. per ton. To or from Burnham to Cumbwitch, or any intermediate place, 3d. per ton.

Two-pence per ton over the above rates will be charged for towing up, in all cases where other tugs are employed to tow down.

Should any vessel require a tug, or aid for more than one tide, such assistance must be paid for in addition to the above rates, according to the services rendered.

Harbour Dues.

One penny per ton register, with 1s. fee for moorage.

*Bridgwater, continued.***Tonnage Rates.****First Class**—Vessels entering with cargoes or departing with cargoes

INWARDS. —For every ship or other vessel which shall enter the said basin, from any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney, and Sark—per ton measurement ..	0
From any other part of Europe except places within the Straits of Gibraltar, and round the North Cape, and from all British Colonies—per ton measurement ..	0
From any port or place in Europe round the North Cape, any port or place within the Straits of Gibraltar whether in Europe, Asia, or Africa, and any port or place in the United States of America—per ton measurement	0
From any port or place in any other part of the world—per ton measurement	0
OUTWARDS. —For every ship or vessel which shall depart from the said basin to any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney, and Sark,—per ton measurement	1
To any other port of Europe, except places within the Straits of Gibraltar, and round the North Cape, or to any British Colony,—per ton measurement.. ..	0
To any port or place in Europe round the North Cape, any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa; any port or place in the United States of America—per ton measurement ..	0
To any port or place in any other part of the world—per ton measurement.. .. .	0
Second Class —Vessels entering without cargoes or in ballast	
For every ship or other vessel which shall enter into the said basin—per ton measurement	0
Third Class —For every ship or other vessel with a cargo which shall enter the said basin and depart therefrom without breaking bulk, or which shall discharge and afterwards take on board and depart with the same cargo—per ton measurement	0
And in estimating the dues contained in this schedule, every vessel of less burthen than twenty tons measurement, shall be rated at twenty tons measurement.	
Extra basin dues for overtime —For every coal vessel remaining in the basin beyond ten days, for every coasting vessel beyond fourteen days, and for every foreign vessel beyond thirty days from the time of their respectively entering the same—per ton measurement, per month ..	0

BRISTOL.

Rates or Fares for Pilotage.

	If 100 and under 100 tons.			If 200 and under 300 tons.			If 300 and under 500 tons.			If 500 and under 600 tons.			If 800 and under 1000 tons.			If 1000 tons and upwards.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
BETWEEN																		
Lundy and Coombe	1	1	0	1	15	0	2	2	0	2	9	0	2	16	3	3	0	3
Lundy and Swansea or Minehead	2	2	0	2	16	3	10	0	4	4	18	0	5	12	6	6	0	7
Lundy and Bridgwater, Cardiff, or the Holmes	2	12	6	3	10	4	7	6	5	5	6	2	6	7	0	7	17	6
Lundy and Newport or Kingroad	3	3	0	4	4	5	5	0	6	6	7	7	0	8	8	9	9	0
Coombe and Minehead	1	1	0	1	8	1	15	0	2	2	2	9	0	2	16	3	3	0
Coombe and Bridgwater, Cardiff, or the Holmes	1	11	6	2	2	2	12	6	3	3	3	13	6	4	4	4	14	6
Coombe and Newport or Kingroad	2	2	0	2	16	3	10	0	4	4	4	18	0	5	12	6	6	0
Minehead and Bridgwater, Cardiff, or the Holmes	0	10	6	0	14	0	17	6	1	1	1	4	6	1	8	1	11	6
Minehead and Newport or Kingroad ..	1	1	0	1	8	1	15	0	2	2	2	9	0	2	16	3	3	0
Between any of the following places:— Portishead, Kingroad, Hungroad, Broad Pill, Cumberland or Bathurst Basins, and any other of such places*	0	10	0	0	15	1	0	0	1	5	1	10	0	1	15	2	0	0
Between any two of the following places, viz:—Bridgwater, Cardiff, the Holmes, Newport and Kingroad	0	10	6	0	14	0	17	6	1	1	1	4	6	1	8	1	11	6

* If under 80 tons, 7s. 6d.

*Bristol, continued.***Harbour Dues.**

	£	s.
For every vessel trading from Africa, Honduras, Surinam, and other ports in South America, the United States of America, the East and West Indies, all the ports within the Straits of Gibraltar, the Southern Whale Fishery, the British Colonies, Portugal, Prussia, Russia, Spain, without the Straits, and Sweden—per ton	0	1
For every vessel trading from Flanders, France, without the Straits, Germany, Guernsey, Holland, Jersey, Norway, Poland, and Zealand—per ton	0	0
For every vessel trading from Ireland, the Isle of Man, Scotland, or as a Coaster, not including vessels from Cardiff, Newport, and other ports to the Eastward of the Holmes—per ton	0	0
For every vessel from Cardiff, Newport, or any other port to the Eastward of the Holmes (not being vessels one-third part of the lading of which shall consist of coal, scroff, iron, tin, tin plates, grain, copper, bricks, stone, coal, tar, slate, bark, timber, or wood,) as follows:—		
If such vessel shall be under forty tons burthen—for each voyage	0	7
If such Vessel shall be forty tons burthen, and under seventy-five tons—for each voyage.. .. .	0	12
If such vessel shall be seventy-five tons burthen, and under one hundred tons—for each voyage	0	16
If such vessel shall be one hundred tons burthen or upwards—for each voyage	1	1
For every Vessel from Cardiff, Newport, or any other port to the Eastward of the Holmes, one-third part of the lading of which shall consist of coal, scroff, iron, tin, tin plates, grain, copper, bricks, stone, coal, tar, slate, bark, timber, or wood, as follows:—		
If such vessel shall not exceed seventy-five tons burthen—for each voyage	0	5
If such vessel shall exceed seventy-five tons burthen—for each voyage	0	7

N.B.—There are no Dock Rates or other Port Charges payable on vessels leaving the Port of Bristol.

BRITON-FERRY.**River Pilotage.**

Vessels drawing	£.	s.	d.	Vessels drawing	£.	s.	d.
7 feet and under.....	0	7	0	11½ feet	0	14	0
7½ feet	0	8	0	12 "	0	15	0
8 "	0	10	0	12½ "	0	16	6
8½ "	0	11	0	13 "	0	18	0
9 "	0	11	2	13½ "	1	0	0
9½ "	0	11	6	14 "	1	4	0
10 "	0	12	0	14½ "	1	7	0
10½ "	0	12	6	15 " and upwards.	1	17	0
11 "	0	13	0				

Towage.

Under 150 tons register.....	Inwards	1½d. per ton register
" 150 "	Outwards	2d. "
Over 150 in and out.....		2d. "

Harbour Dues.

Coastwise or Foreign.....	1½d. per ton register
Layage.....	1s. 6d. each vessel

Loading Charges.

Trimming coal, on cargo	2½d. per ton
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Discharging Ballast.

Without reference to quantity—about 1½d. per ton on cargo.

BURRY PORT.**Harbour Dues.**

For every ship, barge, boat, or other vessel, coming into or going out of the harbour of Burry Port according to its tonnage, (except seeking freight) the sum of fourpence per ton.

For every ship, barge, boat, or other vessel running into the inner harbour by stress of weather, and not unloading, the sum of sixpence per ton, and the outer harbour, the sum of fourpence per ton.

For every ship, barge, boat, or other vessel, coming into the inner harbour from stress of weather, and lying longer than seven days, the sum of threepence per ton per day, and into the outer harbour the sum of twopence per ton per day.

For every ship, barge, boat, or other vessel, coming into the outer harbour to seek a freight, of whatever tonnage, and not remaining beyond three days, the sum of one shilling.

For every day exceeding three days, one shilling per day.

*Burry Port, continued.***Stemming Rates.**

Vessels not exceeding 20 tons register, 6d.; 50 tons, 1s.; 70 tons, 1s. 6d.; 100 tons, 2s.; exceeding 100 tons, 2s. 6d.

Ballast.

For wheeling, per ton register, Outer Harbour, 1d.; Inner Harbour, 1½d.

For use of planks, barrows, and wagons—

	s.	d.		s.	d.
Not above 100 tons register	1	6	Not above 350 tons register	3	6
" 150 "	2	0	" 400 "	4	0
" 200 "	2	6	Above 400 "	4	6
" 300 "	3	0			

Men to be allowed 1s. for assisting to trip the basket, and the same extra charge for the use of crane and tubs, if required.

For Pilotage, see Llanelly.

BURNHAM.

Harbour Dues, 2d. per ton register. **Beacons**, 4s. per vessel.

Pilotage, as per agreement.

CARDIFF.**Pilotage Rates.**

The limit of this Pilotage is the Port of Cardiff and that portion of the Bristol Channel which lies eastward of Lundy Island, up to and including Kingroad and the River Rhymney to Rhymney Bridge. This Pilotage is not compulsory, but may be obtained over all or any portion of this district, at the discretion of the Masters of Vessels.

Harbour Pilotage.—Every licensed pilot employed in taking a ship or vessel between any dock or harbour in the port of Cardiff and any point in Cardiff Roads, or *vice versa*, shall be paid according to the registered tonnage of such vessel, as follows:—

FOR LADEN VESSELS.		£.	s.	d.
If under 60 tons.....		0	5	0
60 tons and under 100 tons		0	7	6
100 " 200 tons		0	12	6
200 " 300 tons		0	17	6
300 " 400 tons		1	1	0
400 " 500 tons		1	5	0
500 " 600 tons		1	7	6
600 " 800 tons		1	10	0
800 " 1000 tons		1	15	0
1000 tons and upwards		2	0	0

For all vessels in ballast, the charges to be one-fifth less than the above rates.

Cardiff, continued.

Channel Pilotage.—Any ship or vessel sailing to or from the port of Cardiff, upon or in the waters of the Bristol Channel between Lundy Island and King Road, for which the services of a duly licensed pilot may be required and rendered, shall pay according to the registered tonnage of such vessel, as follows:—

FOR LADEN VESSELS.

		1st Limit.			2nd Limit.			3rd Limit.		
		£.	s.	d.	£.	s.	d.	£.	s.	d.
If under 100 tons	.....	0	7	6	0	17	6	1	5	0
100 tons and under 200 tons	....	0	10	0	1	5	0	1	15	0
200	300 tons	0	15	0	1	12	6	2	10	0
300	400 tons	0	17	6	1	17	6	2	17	6
400	500 tons	1	0	0	2	2	6	3	5	0
500	600 tons	1	2	6	2	7	6	3	15	0
600	800 tons	1	5	0	2	15	0	4	5	0
800	1000 tons	1	10	0	3	5	0	5	5	0
1000 tons and upwards	.....	1	15	0	3	15	0	6	0	0

For all vessels in ballast, the charges to be one-fifth less than the above rates.

FIRST LIMIT.—Between Cardiff Roads and Nash or Kingroad, or any point east of Nash, and west of Kingroad.

SECOND LIMIT.—Between Cardiff Roads and Combe, or any point west of Nash and east of Combe.

THIRD LIMIT.—Between Cardiff Roads and Lundy Island or any point west of Combe.

Any pilot who may be required to remain on board any ship or vessel for the convenience of the captain, master, owner or agent, after he shall have discharged the duties for which he was engaged, shall be paid ten shillings per day for every day he may be employed, and any pilot who may be required to move any ship or vessel from one dock or tidal harbour to another dock or tidal harbour, occupying only one tide, shall be paid for every ship

		s.	d.
Not exceeding 100 tons register	.....	5	0
100 and not exceeding 300	.....	10	0
300	500	12	6
500	800	17	6
800 and upwards	.....	25	0

Every captain, master, owner or agent of any ship or vessel employing a pilot shall, in addition to the aforesaid charges, pay a Clerk or Collector's fee, as follows:—

		s.	d.
On all ships not exceeding 100 tons register	.....	0	6
From 100	300	1	0
" 300	500	1	6
" 500	800	2	0
" 800 and upwards	.....	2	6

Cardiff, continued.

If from stress of weather or accident, any ship or vessel be compelled to bear up and return from the westward, the pilot in charge shall, upon completion of his engagement, be entitled to one-third pilotage, for the distance for which he may have been engaged, in addition to the fixed rates.

Towage.

Inwards, in ballast	1½d. per ton register
„ with cargo	2d. „
Outwards „	2d. per ton

Town Dues.

Under 60 tons register	2s. 6d. per vessel
Above 60 tons register	5s. 0d. „

Loading Charges.

Trimming coal (single deck)	2½ per ton cargo
„ (double deck)	3d. „
Wharfage on cargo	2d. „

Discharging Ballast.

Vessels under 200 tons	5d. per ton on quantity
200 tons and under 400 tons	6d. „
400 „ 600 tons	7d. „
600 „ 800 tons	8d. „
800 and upwards	9d. „

Tonnage Rates.—Bute Docks.

FIRST CLASS. —On all sailing or steam vessels entering with a cargoes from or departing with cargoes for any port in the United Kingdom, Isle of Man, Jersey, Guernsey, Alderney, and Sark, under 100 tons register				a.	d.
100 tons and under 200 tons register	per register ton	0	1½		
200 tons register and upwards (except steam vessels)	ditto	0	2		
Steam vessels 200 tons register and upwards	ditto	0	3		
		0	2		

Rent, after three weeks from date of entrance,
per register ton, per week 0 0½

SECOND CLASS. —On all sailing or steam vessels with cargoes from or departing with cargoes for any port in Europe, between the North Cape and Cape Finisterre				per register ton	0	5
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Rent, after three weeks from date of entrance,
per register ton per week 0 0½

THIRD CLASS. —On all sailing or steam vessels with cargoes from or departing with cargoes for any port in Europe, and the Mediterranean				per register ton	0	7
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Rent, after three weeks from date of entrance,
per register ton per week 0 0½

Cardiff, continued.

FOURTH CLASS. —On all sailing or steam vessels with cargoes from or departing with cargoes for all other foreign ports whatsoever.....			per register ton	0	9
Rent, after three weeks from date of entrance,			per register ton per week	0	0½
FIFTH CLASS. —On all sailing or steam vessels entering light, or in ballast, and departing in ballast.....			per register ton	0	3
Rent, after three weeks from date of entrance,			per register ton per week	0	0½
SIXTH CLASS. —On all sailing or steam vessels which shall enter laden, and depart without breaking bulk; or which shall discharge and re-load, and depart with the same cargo			per register ton	0	6
Rent, after three weeks from date of entrance,			per register ton per week	0	0½
On every boat, barge, or other craft, which shall enter from the Glamorganshire Canal, and pass through the Dock into the Bristol Channel			per register ton	0	6
On every ship, boat, barge, craft, lighter, or other vessel, which shall enter the ship canal, basin, or dock, for the purpose of unloading from, or discharging goods, wares, and merchandise, on board of any ship, boat, barge, craft, lighter or other vessel, being within the said ship canal, basin or dock; such and the like rates and duties, upon the goods so discharged or loaded, as are taken for wharfage rates, on goods to be landed or loaded upon, or from the wharfs, or quays, of the dock, basin, or jetties.					
On all steam or other vessels, which do not enter within the sea gates of the docks, but which shall either discharge or receive passengers or goods, upon any of the piers, or jetties, outside those gates.....			per register ton	0	2
Bute Tidal Harbour.					
On all sailing or steam vessels, discharging or loading,			per register ton	0	0½

CARMARTHEN.**Harbour Dues.**

	s.	d.		s.	d.
Vessels under 30 tons	1	0	Vessels 80 to 90 tons	2	6
30 to 60 tons	1	6	90 to 110 tons	3	0
60 to 80 tons	2	0	110 tons and upwards	5	0
Pilotage, as per agreement.					

CHEPSTOW.**Harbour Dues.**

One penny per ton register, on all vessels loading or unloading alongside a wharf; also, on all vessels entering or departing the river, if from or to the eastward of the Holmes, 4d; from or to the westward of the Holmes, 2s. 4d.

Pilotage.—The same as Gloucester.

CLOVELLY.**Harbour Dues.**

Vessels not exceeding 20 tons, 1s.; 20 to 50 tons, 2s.; above 50 tons, 4d. per ton.

Pilotage, &c., as per agreement.

GLOUCESTER & BERKELEY CANAL.**Rates of Tonnage,**

Charged upon GROSS and REGISTER weight, and on the ton of 20 cwt. of 112 lbs.

IMPORTS.				Foreign.		Coast-wise.	
				s.	d.	s.	d.
ALE, beer, porter, cider and perry, per brl. of 36 galls.				0	4	0	4
— ditto, in bottle	..	..	.. per dozen	0	1	0	1
Barilla	..	..	.. per ton	1	6	1	0
Bricks, for building	..	..	.. per 1000	2	0	2	0
— scouring, fire, and tiles	..	..	.. per ton	2	0	1	0
Brimstone	..	..	.. "	1	6	1	0
Bones	..	..	.. "	1	0	1	0
Burr stones	..	..	.. "	1	6	1	0
Clay	..	..	.. "	0	6	0	6
Coals	..	..	.. "	0	6	0	6
CORN AND MEAL							
Wheat, and all corn and seed	..	..	.. "	1	9	1	6
Flour and other meal	..	..	.. "	2	0	2	0
Bran and gurgeons	..	..	.. "	1	6	1	6
Earths	..	..	.. "	1	0	1	0
Gunpowder	..	..	.. "	5	0	5	0
Kelp	..	..	.. "	1	6	1	6
Marble	..	..	per ton of 14 cubic ft.	1	6	1	6
Manure	..	..	.. per ton	1	0	1	0
METALS AND ORES							
Copper, spelter, tin, zinc and manganese	..	..	.. "	2	0	0	9
Metallic ores	..	..	.. "	0	9	0	6
Pig iron, and old or loose iron	..	..	.. "	2	0	0	9
All other descriptions of iron	..	..	.. "	2	0	0	9

Gloucester and Berkeley Canal, continued.

IMPORTS, continued.

					Foreign.	Coasting
					s. d.	s. d.
Oil cake	..	..	..	per ton	1 6	1 0
Oysters	..	..	..	per ton of 10 bushels	1 6	1 6
Potatoes	..	..	..	per ton	1 0	1 0
Slates, for roofing	..	..	..	..	2 0	1 6
— for draining	..	..	..	..	2 0	1 0
— slabs, for paving, &c.	..	..	..	..	2 0	1 0
Stone, for roads, pitching, lime, chalk, flint,						
gravel, and sand	..	..	..	..	0 6	0 6
— for building, block, paving, &c.	..	..	..	..	1 0	1 0
— burr stones	..	..	..	..	1 6	1 0
SPIRITS and wine	..	..	..	per pipe, pun. or butt	2 6	2 6
—	..	..	..	per half ditto or hogshead	1 3	1 3
—	..	..	..	all casks under	0 6	0 6
— in bottle	..	..	..	per dozen	0 1	0 1
WOOD AND WOOD GOODS						
Mahogany and fine woods*	..	..	..	per ton	2 0	2 0
Other timber and poles†	..	..	..	..	1 6	1 6
Lathwood	..	..	..	per fathom of 4 feet	2 0	2 0
Deals and battens, per Petersburg standard of						
120, 12 ft. long, 11 in. wide, and 1½ in. thick					3 4	3 4
Staves, Baltic pipe	..	..	..	per 120	3 6	3 6
— Puncheon and hogshead	..	..	..	..	3 0	3 0
— Quebec standard	..	..	..	..	1 6	1 6
— Barrel	..	..	..	..	1 0	1 0
— West India Pun.	..	..	..	..	0 6	0 6
— New Brunswick small	..	..	..	..	0 3	0 3
Laths	..	..	..	per 1000	0 4	0 4
UNENUMERATED ARTICLES	..	..	..	per ton	2 0	1 0

EXPORTS.

Bark	..	..	..	per ton	0 6	1 0
Bricks of all kinds	..	..	..	..	0 6	0 6
Clay	..	..	..	..	0 6	0 6
Coals	..	..	..	..	0 6	0 6
Corn, flour, and meal	..	..	..	..	0 6	0 6
METALS AND ORES						
Metallic ores	..	..	..	..	0 6	0 6
"Puddle bars," Pig Iron, and rough						
cast-iron pipes	..	..	..	..	0 6	0 6
All other description of iron and metals				..	0 6	0 9
Salt	..	..	..	..	0 6	0 6
UNENUMERATED ARTICLES	..	..	..	..	0 6	1 0

* Mahogany, Oak, Ash, Elm, Beech, and other heavy Timber or Wood, 40 feet to the ton.

† Fir, Pine, Deal, and light Woods, 50 feet to the ton.

*Gloucester and Berkeley Canal, continued.***Regulations.**

Tonnage.—One half of the above Rates shall be charged upon goods conveyed along any part of the canal between the Stroud Junction and Sharpness Point, or the Stroud Junction and Gloucester, excepting goods coming under the operation of the 8th, 9th, or 10th, regulations.

If it be proved, to the satisfaction of the toll collectors, that the full rate of tonnage has been paid upon any goods which have passed along the canal, half the full tonnage only shall be charged on such goods repassing along the canal, unless such half rate shall exceed the amount of the export rate, in which case the export rate upon such goods shall be charged.

All goods brought into the canal for sale, and not sold, and then exported in the same bottom, without being landed, shall only be charged with the import rate.

All goods exported in the same bottom or transhipped for export shall be charged with the import rate.

All goods brought into the canal, forming part of a cargo, the original destination of such goods being for any other port than Gloucester, and not landed nor transhipped, shall pass in and out of the canal free of charge, the vessel carrying such goods paying lockage.

All vessels partly laden entering the canal at Sharpness or Gloucester, to complete their cargoes, shall only be charged tonnage rates on the merchandize shipped in the canal, and the usual lockage charges; provided such inward lading is not landed nor transhipped.

All goods brought into the canal, at Gloucester or Sharpness, either by land or water conveyance, and intended for exportation, shall not be charged the tonnage rates until shipped.

All Corn brought to Gloucester from Stroud by the canal shall pay a rate of 4d. per ton, and all Flour, Bran, and Gurgeons so brought, shall pay a rate of 6d. per ton.

All goods brought into the canal at Gloucester, by the Severn, from places above Gloucester, or to the docks at Gloucester, by land carriage, and not conveyed upon the canal below Hempsted Bridge, except goods coming under the 10th regulation, shall pay a rate of 4d. per ton, or the rate by the table, if it be less than 4d.

All goods simply crossing the canal from the South Wales Railway Quay to the yards on the opposite side, lying to the north of the Salt Warehouses, or *vice versa*, not having previously paid canal dues, shall pay a rate of 2d. per ton.

Wharfage.—Goods remaining upon the wharfs (except the wharf specified in the foregoing regulation,) for above *forty-eight hours*, *twopence* per ton. And all goods remaining upon any of the wharfs, excepting the north wharf, shall be further charged wharfage at

Gloucester and Berkeley Canal, continued.

the rate of *twopence* per ton per week, and at that rate for any part of a week they may so remain after the expiration of the forty-eight hours. And all goods remaining upon the "*North Wharf*," shall be further charged wharfage at the rate of *one shilling* per ton per week, and at that rate for any part of a week they may so remain, after the expiration of the forty-eight hours.

All goods deposited upon the wharf underneath the "*Pillar Warehouse*," upon the west side of the basin, and remaining there longer than twenty-four hours, shall be charged 1d. per ton per day.

Goods, carriages of every description, and all other things, shall only be placed on the wharfs, roads, and premises of the Canal Company in such manner, and on such parts thereof as the officers of the Company may direct; and if any goods, carriages, or other things shall be placed contrary to their directions, the officers of the Company may remove the same; and wharfage at the rate of 6d. per ton per hour shall be charged, after notice shall have been given to remove the same.

Floatage of Timber.—For timber discharged from vessels into the canal, on the south side of "*Siller's Bridge*," and remaining afloat on the south side of such bridge, after the expiration of thirty days, a floatage rate of one halfpenny per stick per week shall be paid, and in like proportion for any part of a week; and if such timber should be removed to any part of the canal, on the north side of such bridge, a floatage rate of 1d. per stick for the first week after such removal, and 2d. per stick per week afterwards, and in like proportion for any part of a week, shall be paid.

For timber discharged from vessels into the canal, on the north side of "*Siller's Bridge*," and remaining afloat on the north side of such bridge, after the expiration of fifteen days, a floatage rate of 1d. per stick per week shall be paid, and in like proportion for any part of a week; and should it remain afloat on the north side of such bridge longer than twenty-eight days, after the fifteen days, 2d. per stick per week, and in like proportion for any part of a week, shall be paid.

All timber sold and delivered from one merchant to another, and put into the canal from the yards, and floating in the canal or basins two weeks following, shall pay 2d. per stick per week, and in like proportion for the whole time it may remain afloat. And all timber imported in trows or barges discharged into the canal, shall be subject to the same regulation and charge.

No timber shall be permitted to remain afloat, so as to endanger the navigation of any vessel along the canal, or interrupt or render inconvenient the navigation of the canal.

*Gloucester and Berkeley Canal, continued.***Crannage.**

			£	s.	d.	
For each lift under 2 tons	..	0	0	3	per ton.	
2 tons and under 5	..	0	0	6	"	
5	"	6	"	0	10	0 for each lift.
6	"	7	"	0	12	0 "
7	"	8	"	0	16	0 "
8	"	9	"	1	2	0 "
9	"	10	"	1	10	0 "
10 tons.....	.....	2	0	0	"	

All lifts exceeding 10 tons can only be made by special agreement with the Company, and at rates not less than 10s. for every ton above the preceding.

			£	s.	d.	
10 tons and under 11 tons..		2	0	0	for each lift	
11	"	12	"	2	10	0 "
12	"	13	"	3	0	0 "
13	"	14	"	3	10	0 "
14	"	15	"	4	0	0 "

Lockage.—Every vessel passing through the Company's Locks, empty or in ballast, shall pay 1d. per ton on the register tonnage for each lock of water; and every vessel bringing into, or conveying along the Canal, a less quantity of goods than her register tonnage shall pay 1d. per ton per lock, on the difference between the tonnage of the goods on board, and the register tonnage of the vessel—provided that the hold of the vessel is not full.

In all cases of removal of goods, wares, and merchandize, from the Company's Wharfs or Docks, through the locks, upon which the above rates of tonnage have been paid, such further payment only shall be made as will amount to 1d. per ton on the register tonnage of the vessel departing with such goods.

Moorage.—All vessels remaining in the Canal or Basins longer than one calendar month, shall be charged upon the register tonnage, the following rates, viz. ;—One halfpenny per ton per week, if such vessels shall be moored, or remain on the north side of Hempsted Bridge, and one farthing per ton per week, if moored, or remaining in any part of the Canal below Hempsted Bridge.

Lockage and Moorage.—Boats and vessels under twenty tons burthen shall be rated as twenty tons.

Weighing Machine Rates.—For coal, manure, stone, and gravel, 2d. per ton: all other goods, 3d. per ton.

Tracking.—The following scale of charges shall be paid by the masters of vessels for tracking, viz. :—

*Gloucester and Berkeley Canal, continued.**For the whole length of the Canal.*

- For vessels under 26 tons 8s. 6d. each way.
 „ above 26 and not exceeding 150 tons, 4d. per ton.
 „ above 150 { for 150 tons 4d. „
 { for the remainder 2½d. „
 One-half of the above rates shall be paid to and from the Junction,
 and ½d. per ton per mile for all intermediate distances.

Ballast.

- s. d.
- If put on board at the Ballast Banks 0 8 per ton,
 If brought in carts, or alongside afloat, either at
 Gloucester, or within two miles thereof 1 0 „
 If thus taken in carts or afloat at any other part
 of the Canal 1 2 „
 If in the Tidal Basin at Sharpness 1 6 „
 All ballast not supplied by the ballast contractor will be charged
 tonnage at the rate of 6d. per ton.

Canal Pilotage.

*The Canal Pilots are authorised to demand and take the following
 charges for Piloting Vessels up or down the Canal.*

Vessels under 75 tons register 5s. 0d. up or down

Vessels 75 and under 100 tons register.. 7s. 6d. „

Register Tonnage	Draft of Water.		Charge.		Register Tonnage	Draft of Water.		Charge.	
	ft.	in.	s.	d.		ft.	in.	s.	d.
100 ..	11	0	..	10 0	375 ..	13	9	..	21 0
125 ..	11	3	..	11 0	400 ..	14	0	..	22 0
150 ..	11	6	..	12 0	425 ..	14	3	..	23 0
175 ..	11	9	..	13 0	450 ..	14	6	..	24 0
200 ..	12	0	..	14 0	475 ..	14	9	..	25 0
225 ..	12	3	..	15 0	500 ..	15	0	..	26 0
250 ..	12	6	..	16 0	525 ..	15	3	..	27 0
275 ..	12	9	..	17 0	550 ..	15	6	..	28 0
300 ..	13	0	..	18 0	575 ..	15	9	..	29 0
325 ..	13	3	..	19 0	600 ..	16	0	..	30 0
350 ..	13	6	..	20 0					

And 6d. additional for every three inches draft of water above.

Channel and River Pilotage.

LIMIT.—The Bristol Channel eastward of Lundy, Island including the River
 Severn to the City of Gloucester and the River Wye to Chepstow Bridge.

Every licensed pilot employed in piloting vessels to or from the

Gloucester and Berkeley Canal, continued.

port of Gloucester shall be paid the following Pilotage Rates, according to the register tonnage of the vessel.

				To or from Lundy and								
				Holmes or Cardiff Roads			Kingroad			Sharpness		
				£	s.	d.	£	s.	d.	£	s.	d.
Under 100 tons	.....			1	10	0	2	0	0	4	0	0
100 tons and under 200				2	0	0	2	10	0	5	0	0
200	„	300		2	7	6	3	0	0	6	0	0
300	„	400		2	15	0	3	10	0	7	0	0
400	„	500		3	5	0	4	2	6	8	5	0
500	„	600		3	15	0	4	15	0	9	10	0
600	„	800		4	5	0	5	7	6	10	15	0
800	„	1000		5	0	0	6	5	0	12	10	0
1000 tons and upwards..				5	15	0	7	5	0	14	10	0

				To or from Nash Point or Minehead and								
				Holmes or Cardiff Roads			Kingroad			Sharpness		
				£	s.	d.	£	s.	d.	£	s.	d.
Under 100 tons	.....			1	0	0	1	10	0	3	10	0
100 tons and under 200				1	5	0	1	15	0	4	5	0
200	„	300		1	10	0	2	2	6	5	2	6
300	„	400		1	15	0	2	10	0	6	0	0
400	„	500		2	2	6	3	0	0	7	2	6
500	„	600		2	10	0	3	10	0	8	5	0
600	„	800		2	17	6	4	0	0	9	7	6
800	„	1000		3	7	6	4	12	6	10	17	6
1000 tons and upwards..				3	17	6	5	7	6	12	12	6

				To or from Holmes or Cardiff Roads and					
				Kingroad			Sharpness		
				£	s.	d.	£	s.	d.
Under 100 tons	.....			0	10	0	2	10	0
100 tons and under 200	....			0	12	6	3	2	6
200	„	300	....	0	15	0	3	15	0
300	„	400	..	0	17	6	4	7	6
400	„	500	....	1	2	6	5	5	0
500	„	600	....	1	7	6	6	2	6
600	„	800	....	1	12	6	7	0	0
800	„	1000	....	1	17	6	8	2	6
1000 tons and upwards	.....			2	2	6	9	7	6

				To or from Kingroad and Sharpness—								
				£	s.	d.				£	s.	d.
Under 40 tons	.....			0	15	0	300 tons and under 400			3	10	0
40 tons and under 60				1	1	0	400	„	500	4	2	6
60	„	80		1	11	6	500	„	600	4	15	0
80	„	100		2	0	0	600	„	800	5	7	6
100	„	200		2	10	0	800	„	1000	6	5	0
200	„	300		3	0	0	1000 tons and upwards.			7	5	0

Gloucester and Berkeley Canal, continued.

Pilots taken on board any vessel inward bound to the westward of Ilfracombe, shall be paid the same Pilotage Rates as from Lundy Island; if between the Nash Point and Ilfracombe, the same rates as from the Nash Point; if between the Nash Point and the Holmes, the same rates as from the Nash Point; and if between the Holmes and Kingroad, the same rates as from the Holmes.

Pilots, discharged from any vessel on the outward voyage between any of the stages mentioned in the above scale of rates, shall be paid the same Pilotage Rates as if they had been taken to the next stage beyond the place where they were discharged.

All Vessels piloted to Chepstow or to Lydney shall pay the same Pilotage Rates as to Sharpness, and vice versa, with the exception of Coal laden vessels coastwise to and from Lydney, under 200 tons register, for which a special scale of charges, at a reduced rate, is provided by the 4th Pilotage Bye Law.

Vessels piloted from Sharpness to Lydney, or from Lydney to Sharpness, and then to Kingroad, shall pay the same rates as between Sharpness and Kingroad.

Vessels piloted to and from any place in the River Severn above Sharpness shall pay one-fourth more than the rates between Sharpness and Kingroad.

All light vessels between Kingroad and Sharpness, or any intermediate point, shall be entitled to one-fifth reduction on the full pilotage charges for that portion of the district: and all vessels propelled or towed wholly by steam power, between Kingroad and Sharpness, or any intermediate point, shall be entitled to a further reduction of one-fourth of the full pilotage charges for that portion of the district.

Vessels taking a Pilot from Kingroad to any place on the River Severn must employ assistants to the Pilot, whose number and payment are regulated by the 6th Pilotage Bye Law.

Vessels retaining a Pilot on board after he has discharged the duties for which he has engaged, or whilst waiting for water up the River Severn, or whilst delayed by contrary winds when outward bound, and vessels in charge of a Pilot compelled to bear up and return from the westward from stress of weather or accident, must compensate him according to the regulations contained in the 7th, 8th, and 9th Pilotage Bye Laws.

In addition to the foregoing charges, a Collector's Fee, varying according to the size of the vessel, from 6d. to 2s. 6d. is payable under the 10th Pilotage Bye Law.

HAVERFORDWEST.

Keelage and Wharfage,—One penny per ton registered tonnage.

ILFRACOMBE.**Keelage.**

For every ship or vessel driven in by stress of weather, &c.

Coasters belonging to the port..... 0s. 6d.

„ not belonging to the port .. 1s. 6d.

Vessels going to or coming from any of Her Majesty's Plantations in Asia, Africa, or America, 2s. 6d.

Also, for every vessel paying keelage, the additional sum of 6d. for each Top borne by such vessel.

Lighthouse.

For every vessel belonging to the port 0s. 6d.

For every vessel not belonging to the port 1s. 0d.

The Light is kept up from the 1st day of September to the last day of March in every year.

Mooring Chains and Buoys.

Smacks, 1s.

Two-mast vessels, 2s.

Harbour Dues.

Coasting Smacks, 3s. 6d. Schooners, 4s. 6d. Brigs, 5s. 6d.

Foreign going, 1s. extra.

When the Light is out, 6d. each less for vessels belonging to the Harbour, and 1s. each less for vessels not belonging to the Harbour.

LLANELLY.**Pilotage.**

LIMIT No. 1.—If a Pilot be taken on board as far to the westward as to bring Rhossilly Church open to the westward of the Holmes, he is to be paid for every foot of water the vessel may draw.

LIMIT No. 2.—If taken on board within No. 1. but to the westward of No. 4 buoy for Pembrey, or No. 6 for Llanelly.

	Limit No. 1.		Limit No. 2.		Outwards.	
	s.	d.	s.	d.	s.	d.
Under 50 tons register ..	1	6	0	9	0	9
From 50 to 75 „ ..	1	9	1	0	1	0
75 to 100 „ ..	2	0	1	3	1	3
100 to 125 „ ..	2	3	1	6	1	6
125 to 150 „ ..	2	6	1	9	1	9
150 to 175 „ ..	2	9	2	0	2	0
175 to 200 „ ..	3	0	2	3	2	3
200 to 225 „ ..	3	3	2	6	2	6

and 3d. per foot for every additional 25 tons register.

Pilots taken on board inside buoy No. 6, when bound for Llanelly, or inside No. 4, when bound for Pembrey, to be paid 2s. 6d. each for a hobble.

Llanelly, continued.

If any vessel shall evade being boarded by a Pilot in Limit No. 1, she shall pay for Limit No. 1, although boarded above that limit, beside the penalty for refusing a Pilot.

Every vessel paying 2s. per foot and upwards, shall be taken by the Pilot clear of the Holmes, if required.

Each vessel to pay 1s. for the boat.

That when any vessel not exceeding 125 tons register shall have the assistance of a steam-tug in taking her out to sea, a reduction of ten per cent. shall be made on her outward Pilotage.

That all vessels proceeding above Llanelly shall pay as follows, in addition to the rates inwards and outwards from Llanelly:—

	To or from Penclawdd			To or from Spitty			Penclawd to Spitty	
	s.	d.		s.	d.		s.	d.
Under 50 tons register..	2	6	..	4	0	..	2	6
From 50 to 100 „	3	6	..	6	0	..	3	6
100 to 150 „	4	6	..	8	0	..	4	6
150 to 200 „	6	0	..	9	6	..	6	0

and 6d. for every additional 25 tons register.

Harbour Pilotage.

Under 50 tons, 2s.; 50 and under 75, 2s. 6d.; 75 and under 100, 3s.

For removing vessels between

	Llanelly and Pembrey			Pembrey and Burry Port	
	s.	d.		s.	d.
Under 50 tons register ..	3	6	..	3	6
75 „	4	6	..	4	0
100 „	5	6	..	4	6

For every additional 25 tons—Llanelly and Pembrey, 1s.; Pembrey and Burry Port, 6d.

Vessels sailing from the port, and putting back after having discharged their Pilots, to pay half Pilotage in and out.

Three shillings and sixpence to be the rate charged for a Bar hobble.

“Ceres” Pilot Ship.

That a charge of 2s. 6d. per 100 tons register be made upon every vessel taking a Pilot boarded from the “Ceres.”

Ballast Rates.

Every vessel shall pay for every ton discharged, 4½d.

For each man otherwise employed, ½d. per ton.

Buoyage Dues.

For every ship or other vessel entering into the Rivers Burry, Loughor, and Lliedi, or either of them, from and over the Bar of Burry, 1d. per ton register.

*Llanelly, continued.***Dock Dues.**

Llanelly or New Dock..... 2d. per ton register.

Copper Works Dock 1d. „

Carmarthenshire Dock, 1d. per ton register, for vessels entering or using the Dock, and 1d. per ton the first week, and a farthing per ton every week after, if for repairs or lying up.

LYDNEY.**Tonnage Rates.**

	s.	d.		s.	d.
1 to 10 tons burthen ..	1	0	45 to 50 tons burthen ..	4	6
11 to 20 „ ..	2	0	51 to 80 „ ..	5	0
21 to 30 „ ..	3	0	81 to 100 „ ..	6	0
31 to 44 „ ..	4	0	101 tons and upwards	7	6

Pilotage.—The same as Gloucester.

MILFORD.**DEFINITION OF LIMITS.**

From Caldy Island along the coast to St. David's Head, and from thence to Cardigan Island, and *vice versa*; and to and from, and into and out of all ports and places within these Limits.

Pilotage Rates.

	Under 14 ft. per foot			14 ft. & up per foot.		
	£	s.	d.	£	s.	d.
<i>From</i> a line drawn from St. Ann's Point to Sheep's Island, to any part of the Harbour below a line drawn from Newton Noyse Point to Martin's Haven.....	0	2	6	0	3	6
<i>From</i> a line drawn from St. Ann's Point to Sheep's Island, or from Habberstone Road, to any place above a line drawn from Newton Noyse Point to Martin's Haven in addition	0	2	0	0	2	6

Vessels inward-bound not boarded until they have passed a line drawn from Rat Island to Watwick Point, are to pay one-fourth less than the foregoing rates, and if not boarded until they have passed a line drawn from Thorne Island to Great Castle Head, they are to pay one-half only of the said rates, and if not boarded until they have passed the Stack Rock, to a line from Newton Noyse Point to Martin's Haven, they are not to be chargeable with any Pilotage unless the masters thereof require Pilotage assistance.

*Milford, continued.***Additional Rates.***For Ships boarded without the entrance of the Harbour.*

	£	s.	d.
From a line drawn from Leuny Point to Skokham Island,			
in addition, per foot	0	2	0
If to the southward of St. Gowan's Head, ditto	0	1	0
Or from Caldy Island eastward, or from the westward of			
the Grassholm, or three leagues without Leuny Point,			
in addition to the Harbour Pilotage	3	3	0
Six leagues, ditto	4	4	0
Ten leagues, ditto	6	6	0

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first-mentioned ships shall by any order of Her Majesty's most Honorable Privy Council, be privileged to enter the ports of this Kingdom upon paying the same duties of tonnage as are paid by British ships, in which case such ships and vessels not having British registers shall pay the like rates of pilotage only as are payable by ships having British registers. The said surplus rate chargeable on unprivileged Foreign vessels is to be paid to the Collector of this Corporation's Light Duties, at the Custom House, Milford.

Port Charges.

	£	s.	d.
Keelage	0	0	4
Making fast to the rings	0	0	6
Quayage and moorage per ton register	0	0	0½
Foreign vessels, loading or discharging, per ton..	0	0	6
Coasting vessels, loading or discharging, per ton..	0	0	2
Loading ballast, per ton	0	0	2
Deposit for landing ballast on quay	1	0	0
Ballast lying on the quay, per ton	0	0	0½
Use of beach discharging	0	1	0
Use of beach outfitting or repairing, per ton register	0	0	1
Vessels lying alongside the quay for any period not			
exceeding one month, per ton register	0	0	2
And for every succeeding month	0	10	0

NEATH.**Tonnage Rates.**

For every ship or vessel which shall anchor, load, or unload within the said port, or which shall be made fast to any pier or other work within the same, or any part thereof, the sum of 1½d, per ton of the register tonnage of such ship or vessel.

*Neath, continued.***Rates of Pilotage.**

	1st Station.	2nd Station.	3rd Station.
	£ s. d.	£ s. d.	£ s. d.
Vessels drawing 7 feet and under	0 7 0	0 8 0	0 10 0
" 7½ feet	0 8 0	0 9 6	0 11 6
" 8 "	0 10 0	0 11 9	0 13 9
" 8½ "	0 11 0	0 12 0	0 15 0
" 9 "	0 11 2	0 12 6	0 15 6
" 9½ "	0 11 6	0 13 2	0 16 8
" 10 "	0 12 0	0 14 0	0 17 6
" 10½ "	0 12 6	0 14 9	0 18 3
" 11 "	0 13 0	0 15 6	0 19 0
" 11½ "	0 14 0	0 16 6	1 0 0
" 12 "	0 15 0	0 19 0	1 2 0
" 12½ "	0 16 6	1 1 0	1 4 0
" 13 "	0 18 0	1 3 0	1 6 0
" 13½ "	1 0 0	1 5 6	1 9 0
" 14 "	1 4 0	1 10 0	1 15 0
" 14½ "	1 7 0	1 14 0	2 0 0
" 15 and upwards	1 17 0	2 2 0	2 7 0

FIRST STATION.—From outside of Neath Bar to the Layer, and to any distance between the Layer and Southern end of the Abbey Estate, and *vice versa*.

SECOND STATION.—From outside of Neath Bar to any distance lying between the inner termination of the first Station and the Abbey Pill, and *vice versa*.

THIRD STATION.—From outside of Neath Bar to any distance lying between the Abbey Pill and Neath Bridge, and *vice versa*.

The above Rates include the charges for Boats and Hobblers.

For conducting vessels from one of the above-named stations to another within the port :—

For vessels under 100 tons	3s.
" " 130 "	4s.
" above 130 "	5s.

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first mentioned ships shall, by any order of Her Majesty's most Honorable Privy Council, be privileged to enter the ports of this kingdom, upon paying the same duties of tonnage as are paid by British ships, in which case such ships and vessels not having British registers shall pay the like rates of pilotage only as are payable by ships having British registers.

Pilot leading the way (if required by the master of the vessel following), entitled to half-pilotage as far as he shall lead.

Pilot from or to the Mumbles (when required by the master), to receive, in addition, 4s.

*Neath, continued.***Rates to Hobblers.**

	s.	d.
Hobblers over the Bar, to or from the Layer or Giant's Grave, or the southern end of the Abbey Estate..	2	6 per vessel
Hobblers over the Bar, to or from Fox's Coal Bank, or the Copper Works, or the Abbey Pill..	3	0 „
Hobblers over the Bar, to or from Melincrythan Wharf or Neath Bridge	4	0 „
Hobblers employed in removing or assisting vessels within the Harbour.	1	6 per tide

Towage Rates and Regulations.

INWARDS.		Per ton register	
		s.	d.
From the Outer Buoy to Layer or Giant's Grave ..	0	1	$\frac{1}{2}$
„ „ Abbey Coal or Crown Copper Works ..	0	1	$\frac{1}{2}$
„ „ Mines Royal Copper Works ..	0	2	
„ „ Neath	0	2	$\frac{1}{2}$

OUTWARDS.

From Giant's Grave or the Layer to Sea or Outward Buoy	0	2
„ Abbey Coal or Crown Copper Works to Sea or Outward Buoy	0	2
„ Abbey Pill or Mines Royal Copper Works to Sea or Outward buoy	0	2
„ Neath to Sea or Outward Buoy	0	2

Vessels that may require to be towed shorter distances, if not having been offered the steamer to tow them the whole distance from where they were laden or going to load, to pay as under:—

From the Layer to Giant's Grave, and <i>vice versa</i> ..	0	0	$\frac{1}{2}$
„ Abbey Coal or Crown Copper Works ..	0	1	
„ Abbey Pill or Mines Royal Copper Works ..	0	1	$\frac{1}{2}$
„ Neath	0	1	$\frac{1}{2}$
From Giant's Grave to Abbey Coal or Crown Copper Works ..	0	0	$\frac{1}{2}$
„ Abbey Pill or Mines Royal Copper Works ..	0	1	
„ Neath	0	1	$\frac{1}{2}$
From Abbey Coal or Crown Copper Works to the Pill ..	0	0	$\frac{1}{2}$
„ „ „ Neath	0	1	
Light vessels towed from Swansea or Port Talbot to Giant's Grave....	0	2	
Light vessels towed from Neath Harbour to Swansea or Port Talbot	0	6	
Loaded vessels towed to Swansea or Port Talbot (in addition to the rate of towage from the various Stations to the Outward Buoy)	0	3	

Neath, continued.

Vessels from 150 tons register and upwards, for towage
in or out, to or from Giant's Grave.. .. 0

All vessels not exceeding thirty tons register to pay 3s. 6d.
towage in or out, to or from Giant's Grave.

Three shillings the lowest rate for any towage.

NEWPORT.**Tonnage Rates.**

Coastwise, $\frac{1}{4}$ d. per ton register. Foreign, $\frac{1}{4}$ d. per ton register.

Keelage.

One penny per ton taken on discharged at the Wharves in the River.

Tonnage Rates—Docks

INWARDS.—For every ship or other vessel which shall enter
the said dock from any part of Great Britain, Ireland, the
Isle of Man, or any part of the Islands of Guernsey, Jersey,
Alderney, and Sark, per ton measurement 0

For every other part of Europe, except places within the
Straits of Gibraltar and round the North Cape, per ton
measurement. 0

From any port or place in Europe round the North Cape, or
any port or place within the Straits of Gibraltar, whether
in Europe, Asia, or Africa, per ton measurement. 0

From any port or place in British America, any port or place
in the United States of America, or any port or place in any
other part of the world, per ton measurement. 0

For every ship or other vessel, with a cargo, which shall enter
the said dock, and depart therefrom, within three weeks from
the day of entry, without breaking bulk, or which shall dis-
charge, and afterwards take on board, and depart with the
same cargo, within such period of three weeks, per ton
measurement (exclusive of the dues under the name of rent,)
hereinafter mentioned 0

For every ship or other vessel which shall have departed from
the said dock, with a cargo, or any part of such cargo laden
therein, and shall re-enter the said dock, with the same cargo,
or part of such cargo, per ton measurement, (exclusive of the
dues under the name of rent hereinafter mentioned) 0

OUTWARDS.—For every ship or other vessel which shall depart
from the said dock to any part of Great Britain, Ireland, the
Isle of Man, or any of the Islands of Guernsey, Jersey,
Alderney, and Sark, per ton measurement 0

Newport, continued.

	s.	d.
To any other part of Europe, except places within the Straits of Gibraltar and round the North Cape, per ton measurement	0	5
To any port or place in Europe, round the North Cape, or any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa, per ton measurement	0	7
To any port or place in British America, any port or place in the United States of America, or any port or place in any other part of the world, per ton measurement	0	10
For every ship or other vessel which shall enter the said dock in ballast, or light, and depart therefrom in ballast, or light, per ton measurement (exclusive of the dues under the name of rent, hereinafter mentioned)	0	3

Police and Watchmen.

For all vessels entering or departing from the dock, at per week, or fractional part of a week	1	0
N.B.—Competent watchmen for the protection of vessels and property therein can be obtained on application at the dock-office, the charge for each watchman is per night	3	6

Rent Charges.

All ships and vessels entering the dock in ballast and departing with cargoes not exceeding 400 tons register measurement, to be allowed to remain at the rates before specified for a period of	2 weeks.	
Above 400 tons and not exceeding 700 tons register measurement	3	„
Above 700 tons register measurement	4	„
Vessels above 70 tons and not exceeding 700 tons register measurement entering with a cargo and going out with another	4	„
Vessels above 700 tons register measurement entering with a cargo and going out with another	5	„
Vessels above 70 tons register measurement, entering with a cargo and going out without breaking bulk, or which shall discharge, and afterwards take on board and depart with the same cargo	3	„
Vessels under 70 tons register measurement, entering the dock without ballast	4 days	
	s.	d.
All ships and vessels which shall remain in the dock for any longer periods than those respectively above stated, shall be subject (in addition to the rates and dues before stated) to a rent charge of, for the first week, or any portion of a week, per ton register measurement	0	0½

Newport, continued.

	s.	d.
For the second week or any portion of a week, per ton register measurement	0	1
For the third week or any portion of a week, per ton register measurement	0	1½
For the fourth week and every subsequent week and for any portion of a week, per ton register measurement	0	2
N.B.—In estimating the dues contained in the foregoing schedule, every vessel of less than 20 tons register measurement shall be rated at 20 tons register measurement.		

Use of Machinery for Shipping or Unshipping.

For every ton of coal	0	1½
For every ton of coke, culm, iron, cinders, iron ore, earth or rubbish of any kind	0	2½
For every ton of metallic (not iron) ore.. .. .	0	3
Whenever wagons containing any of the above articles are moved on the railway sidings by hydraulic power in connection with the shipping machines, a charge will be made at the rate per ton, of		
	0	1
All articles, matters or things not included in the above-mentioned, and excepting ballast, will be subject to special agreement and charges.		
Persons (other than the crews of vessels on the dock), landing or embarking on the Dock Company's premises, will be subject to a charge per head, of		
	0	1

Charges for Discharging and Removing Ballast.

For every ton of ballast that is in the hold within 15 feet abaft, and 15 feet before any hatchway	1	0
For every ton of ballast exceeding in the hold a greater distance than stated above, an additional sum of	0	2
An additional charge for working by night will be made at the rate of, per ton.. .. .	0	3

Rates of Pilotage.

The Limit of this Pilotage is that portion of the Bristol Channel which lies eastward of Lundy Island, up to, and includes Kingroad and the River Usk as far as the Caerleon Bridge. This Pilotage is not compulsory, but may be obtained over all or any portion of this district, at the discretion of the masters of vessels.

Every licensed Pilot employed in piloting vessels to or from the port of Newport shall be paid the following Pilotage Rates, according to the registered tonnage of the vessel.

Newport, continued.

FOR LADEN VESSELS.

		Newport to Mouth of River Usk.			Newport to the Holmes or Cardiff Roads.		
		£	s.	d.	£	s.	d.
If under 100 tons.....		0	10	0	..	0	13 0
100 tons and under 200		0	15	0	..	1	0 0
200	300	0	17	6	..	1	10 0
300	400	1	2	6	..	1	15 0
400	500	1	5	0	..	2	1 0
500	600	1	6	0	..	2	3 0
600	800	1	8	0	..	2	8 0
800	1000	1	10	0	..	2	12 0
1000 tons and upwards		1	12	0	..	2	16 0

For all vessels actually engaged in the coasting trade of the United Kingdom, and vessels in ballast the charges to be one-third less than the above.

FOR LADEN AND UNLADEN VESSELS.

		Limit No. 1.			Limit No. 2.			Limit No. 3.		
		£	s.	d.	£	s.	d.	£	s.	d.
If under 100 tons .. .		0	7	6	0	17	6	1	5	0
100 tons and under 200		0	10	0	1	5	0	1	12	6
200	300	0	15	0	1	15	0	2	10	0
300	400	0	17	6	1	17	6	2	17	6
400	500	1	0	0	2	2	6	3	5	0
500	600	1	2	6	2	7	6	3	15	0
600	800	1	5	0	2	15	0	4	5	0
800	1000	1	10	0	3	5	0	5	5	0
1000 tons and upwards..		1	15	0	3	15	0	6	0	0

LIMIT No. 1.—Between the Holmes or Cardiff Roads and Minehead or Kingroad, or any Point east of Minehead and west of Kingroad.

LIMIT No. 2.—Between the Holmes or Cardiff Roads and Coombe, or any Point west of Minehead or Nash Point, and east of Coombe.

LIMIT No. 3.—Between the Holmes or Cardiff Roads and Lundy Island, or any Point west of Coombe.

Any Pilot who may be required to remain on board any ship or vessel for the convenience of the captain, owner, or agent, after he shall have discharged the duties for which he was engaged, shall be entitled to be paid ten shillings per day for every day he may be employed; and any Pilot who may be required to move any ship or vessel in the dock, harbour, or river, occupying only one tide, shall be entitled to be paid for every ship

	s.	d.
Under 100 tons	4	0
100 and under 300	5	0
300 " 500	7	6
500 " 800	10	0
800 and upwards	12	6

Newport, continued.

Vessels wind bound in the waters of the Newport District, and retaining the services of a Pilot, shall pay five shillings per diem.

Pilots taken on board of any vessel inward bound to the westward of Ilfracombe, shall be paid the same Pilotage rates as from Lundy Island; but if west of Nash Point or Minehead and east of Ilfracombe the same rates as from the Nash Point; if between the Nash Point and the Holmes, the same rates as from the Nash Point; and if between the Holmes and Kingroad, the same rates as from the Holmes.

In case any vessel shall be compelled to bear up and return from the westward from stress of weather or accident, the Pilot in charge shall be entitled to, and shall be paid one-third of the Pilotage charge in addition, according to the distance such ship or vessel may have reached before she shall have put back.

Every master, owner, or agent of any vessel employing a Pilot, shall, in addition to the foregoing charges, pay a clerk or collector's fee, as follows, viz. :—

	s.	d.
Vessels under 100 tons	0	6
100 and under 300	1	0
300 „ 500	1	6
500 „ 800	2	0
800 and upwards	2	6

PEMBREY.**Ballast Rates.**

Wheeling 1d. per ton register.

Every man employed on board to be paid at the rate of three shillings per day.

Each vessel to pay extra for the use of the planks, barrows, and waggons, viz. :—

	s.	d.
Not exceeding 50 tons register	1	0
„ 100 „	1	6
„ 150 „	2	0
„ 200 „	2	6
„ 300 „	3	0
„ 350 „	3	6
„ 400 „	4	0
Exceeding 400 „	4	6

The same charge extra for the use of the crane and tubs if required.

Harbour Dues.

	s.	d.
For every ship, barge, boat, or other vessel, coming in or going out of the harbour, to load or unload, per ton	0	2

Pembrey, continued.

For every ship, barge, boat, or other vessel, running into the harbour by stress of weather, and not unloading ..	s. d.	0 1
And for every such ship, barge, boat, or other vessel, running into the harbour by stress of weather, for shelter, and lying longer than 7 days, the further sum per ton per day of ..	0 0	0 0
For every ship, barge, boat, or other vessel, coming into the harbour to seek a freight of whatever tonnage, the sum of ..	1 0	1 0

Steaming.

Vessels not exceeding 20 tons register	s. d.	0 6
" 50 "	1 0	
" 75 "	1 6	
" 100 "	2 0	
Exceeding 100 "	2 6	

PENNARD.

Keelage, 4d. per ton register.

PORTHCAWL.**Tonnage Rates.**

Coastwise, 2d. per ton register. Foreign, 4d. per ton register.

Ballast.

Not exceeding 15 tons 6d. per ton register.

Exceeding 15 tons 4d.

Any ship arriving in tow of a steamer, after having discharged her last cargo at a neighbouring port shall pay 1s. per ton for discharging her ballast, if not exceeding 15 tons; if exceeding 15 tons, 4d. per ton register tonnage.

Pilotage.

From any place between Sker or Nash Points, and inside the sands into the harbour, and out of the harbour, to every such place:

Per registry under 30 tons	£ s. d.	
30 and under 40 "	0 4 0	
40 " 50 "	0 5 0	
50 " 60 "	0 6 6	
60 " 75 "	0 8 0	
75 " 100 "	0 10 0	
100 " 125 "	0 12 0	
125 " 150 "	0 15 0	
150 " 175 "	0 18 0	
175 " 200 "	1 2 0	
200 " 225 "	1 6 0	
225 tons and upwards	1 10 0	
	1 14 0	

L

Porthcawl, continued.

And for the use of the pilot boat, every ship using the same :

	s.	d.
Per registry under 75 tons	1	0
75 tons and upwards	2	0

For transporting a ship in the harbour, and re-mooring her, or for mooring and unmooring a ship, 1s. 6d. for each pilot, and 9d. for each hobbler.

And if any master of a ship shall engage a pilot and hands to take his ship out of the harbour, and she is not ready to be taken out during that tide, or if after having been moved for the purpose of being taken out she does not proceed, 1s. 6d. for each pilot, and 9d. for each hobbler or assistant.

PORT TALBOT.**Tonnage Rates.**

For every vessel laden 3d. per ton register.

For every vessel in ballast .. 2d. ,,

Pilotage.

		From Outer Buoy to destination, if in 1 tide of 3 hrs.			To Outer Buoy from berths, if in 1 tide of 3 hrs.				
		£	s.	d.	£	s.	d.		
Above 25 tons register and under	40	..	0	5	0	..	0	4	0
40	..	0	6	0	..	0	5	0	
50	..	0	7	0	..	0	6	0	
60	..	0	8	0	..	0	6	10	
70	..	0	9	0	..	0	7	8	
80	..	0	10	0	..	0	8	6	
90	..	0	12	0	..	0	9	10	
100	..	0	14	0	..	0	11	6	
120	..	0	16	0	..	0	13	2	
140	..	0	18	0	..	0	14	10	
160	..	1	0	0	..	0	16	6	
180	..	1	5	0	..	1	0	0	
200	..	1	10	0	..	1	3	6	
250	..	2	0	0	..	1	10	4	
300	..	2	15	0	..	2	0	8	
350	..	3	10	0	..	2	11	4	
and for every additional 50 tons	....	0	5	0	..	0	4	0	

If inside the outer buoy only one-half of the foregoing rates.

For transporting a vessel from one part of the harbour to another—under 100 tons, 2s. 6d.—above 100 tons, 5s.

The price paid to hobbles not to exceed 2s. for each hobble; and no hobble shall charge two hobbles, unless occupied for more than three successive hours.

Port Talbot, continued.

For every hobbler engaged by the master, 1s. 6d. from sea into the lock, and 2s. from sea to the wharf of her destination; if required to tow, 6d. additional to each hobbler; if engaged only to the end of the breakwater, half the above rates only to be charged.

Steam Tugs.*To or from the Outer Buoy.*

Register Tonnage.	£	s.	d.	Register Tonnage.	£	s.	d.
20 tons and under ..	0	3	0	100 and under 120 ..	0	17	0
20 and under 30 ..	0	4	0	120 „ 150 ..	1	1	0
30 „ 40 ..	0	5	0	150 „ 200 ..	1	5	0
40 „ 50 ..	0	6	0	200 „ 250 ..	1	10	0
50 „ 60 ..	0	8	0	250 „ 300 ..	2	0	0
60 „ 70 ..	0	9	0	300 „ 400 ..	2	10	0
70 „ 80 ..	0	10	6	400 „ 500 ..	3	10	0
80 „ 90 ..	0	13	0	500 „ 600 ..	4	10	0
90 „ 100 ..	0	15	0	every additional 50 tons	0	5	0

Stemming fee, 1s.

For use of Harbour Company's tow rope :

	s.	d.
Vessels under 50 tons register burthen	1	0
„ of 50 tons and under 100	3	0
„ 100 „ 200	3	0
„ 200 „ 300	4	0
„ 300 tons and upwards	5	0

Ballast.

Ballast in the river is free of charge : in the dock 3d. per ton.

For use of planks and barrows, for 10 tons and under, 2s.; 10 tons and under 20, 3s. 6d.; and 1s. extra for every 10 tons additional.

For use of the graving bank :—on the hard, 1d. per ton register per week; on the blocks, 1½d. per ton register per week.

SAUNDERSFOOT.

Pilotage.—For every 100 tons in and out, 10s.

Harbour Dues.—2d. per ton register.

Pier Light and Signal.

Each vessel.	s.	d.	Each vessel.	s.	d.
20 to 30 tons register	0	3	70 to 100 tons register ..	1	0
30 to 50 „	0	6	100 to 150 „ ..	1	6
50 to 70 „	0	9	150 tons and upwards....	2	0

Discharging Ballast.

For each man employed on board 1d. per ton register

For wheeling 1d. „

Trimming.—2d. per ton.

SWANSEA.**Tonnage Rates.**

For every vessel bound from and to any port or place in the United Kingdom, or the Isle of Man, under 150 tons	per ton	0
150 tons and under 250 tons	per ton	0
250 tons and under 350 tons	per ton	0
350 tons and upwards	per ton	0

For every vessel bound to or from any port or place in Europe, or any port or place within the Straits of Gibraltar, under 100 tons	per ton	0
100 tons and under 250 tons	per ton	0
250 tons and under 350 tons	per ton	0
350 tons and upwards	per ton	0

For every vessel bound to or from any other port or place than above specified, under 150 tons	per ton	0
150 tons and under 250 tons	per ton	0
250 tons and under 350 tons	per ton	1
350 tons and upwards	per ton	1

And in respect of Vessels entering in Ballast, and departing with Cargoes, the following Rates.

Vessels bound to ports in the United Kingdom, or the Isle of Man	per ton	0
Vessels bound to any port in Europe, or within the Straits of Gibraltar, under 100 tons.....	per ton	0
100 tons and under 250 tons	per ton	0
250 tons and under 350 tons	per ton	0
350 tons and upwards	per ton	0
Vessels bound to any other ports, under 150 tons ..	per ton	0
150 tons and under 250 tons	per ton	0
250 tons and under 350 tons	per ton	0
350 tons and upwards.....	per ton	0 1

Vessels driven in by stress of weather, and remaining over fortides, half the above rates. Vessels remaining over thirty days, unless prevented by embargo or weather, 1d. per ton per week.

Craneage,*At Corporation Cranes, Public Quay.*

For every lift under 1 ton	s.	d.
Not exceeding 2 tons	0	3 per lift
2 to 5 tons	0	3 per ton
Five tons and upwards	0	6 "
	2	0 "

*Swansea, continued.***Ballast Rates.**

Register Tonnage.	Rates per ton on the quantity discharged.			
Under 100 tons	0s.	5d.	at New Cut ..	0s. 6d. in Dock
100 and under 150 tons	0s.	7d.	" ..	0s. 8d. "
150 and under 200 tons	0s.	9d.	" ..	0s. 10d. "
200 tons and upwards..	0s.	11d.	" ..	1s. 0d. "

Additional Charges.

	s.	d.	
Discharged from any vessel into another vessel	0	9	per ton
Discharged into Lighters	1	6	"
Loaded into any vessel	0	6	"
Loaded into any vessel, and discharged therefrom....	1	6	"

Charges for use of five and ten ton Cranes,*Belonging to the Harbour Trustees.*

	£	s.	d.		£	s.	d.	
Under 1 ton ..	0	0	3	per lift	5 and under 6..	0	7 6	per lift
1 and under 2..	0	0	6	"	6 "	7..	0 10 0	"
2 "	3..	0	1 6	"	7 "	8..	0 12 6	"
3 "	4..	0	3 0	"	8 "	9..	0 15 0	"
4 "	5..	0	4 6	"	9 "	10..	1 0 0	"

No lift to exceed ten tons.

Towage.*In or Out, exclusive of Harbour Towsages.*

	£	s.	d.		£	s.	d.
Under 50 tons	0	7	6	425 and under	450	3	15 0
50 and under	75	0	10 0	450 "	475	4	0 0
75 "	100	0	12 6	475 "	500	4	5 0
100 "	125	0	15 0	500 "	525	4	10 0
125 "	150	0	17 6	525 "	550	4	15 0
150 "	175	1	0 0	550 "	575	5	0 0
175 "	200	1	5 0	575 "	600	5	5 0
200 "	225	1	10 0	600 "	650	5	10 0
225 "	250	1	15 0	650 "	700	5	15 0
250 "	275	2	0 0	700 "	750	6	0 0
275 "	300	2	5 0	750 "	800	6	5 0
300 "	325	2	10 0	800 "	850	6	10 0
325 "	350	2	15 0	850 "	900	6	15 0
350 "	375	3	0 0	900 "	950	7	0 0
375 "	400	3	5 0	950 "	1000	7	7 0
400 "	425	3	10 0				

All vessels above 1000 tons, 2d. per ton, new measurement.

If more than one Tug is required, half the above rates will be charged for each additional Tug.

Swansea, continued.

Register Tonnage		Pilotage.		Inwards		Outwards		Total	
				£	s. d.	£	s. d.	£	s. d.
Vessels 50 tons and under	75			0	10 0	0	6 0	0	16 0
Vessels 75 tons and under	100			0	11 0	0	7 0	0	18 0
Vessels 100 tons and under	125			0	12 0	0	8 0	1	0 0
Vessels 125 tons and under	150			0	14 0	0	8 0	1	2 0
Vessels 150 tons and under	175			0	17 0	0	8 0	1	5 0
Vessels 175 tons and under	200			0	19 0	0	8 0	1	7 0
Vessels 200 tons and under	250			1	6 0	0	10 0	1	16 0
Vessels 250 tons and under	300			1	12 0	0	12 0	2	4 0
Vessels 300 tons and under	350			2	3 0	0	14 6	2	17 6
Vessels 350 tons and under	400			2	10 0	0	17 0	3	7 0
Vessels 400 tons and under	450			2	17 6	1	2 0	3	19 6
Vessels 450 tons and under	500			3	5 0	1	7 0	4	12 0
Vessels 500 tons and under	550			3	10 0	1	12 0	5	2 2
Vessels 550 tons and under	600			3	15 0	1	17 0	5	12 0
Vessels 600 tons and under	650			4	0 0	2	2 0	6	2 0
Vessels 650 tons and under	700			4	5 0	2	7 0	6	12 0
Vessels 700 tons and under	750			4	10 0	2	12 0	7	2 0
Vessels 750 tons and under	800			4	15 0	2	17 0	7	12 0
Vessels 800 tons and under	850			5	0 0	3	2 0	8	2 0
Vessels 850 tons and under	900			5	5 0	3	7 0	8	12 0
Vessels 900 tons and under	950			5	10 0	3	12 0	9	2 0
Vessels 950 tons and under	1000			5	15 0	3	17 0	9	12 0

together with an additional sum of 5s. in respect of every 50 tons above 950 tons, on the Inward Pilotage: and an additional sum of 5s. in respect of every 50 tons above 950 tons, on the Outward Pilotage.

Pilots will take vessels over 500 tons register, Outward Bound, clear of the Green Grounds, on to the Mumbles Roads; and the above charge includes landing the Pilot in all cases.

One half the above rates only to be paid and payable to every Pilot navigating or assisting any vessel (not entering Swansea Harbour), within any part of Swansea Bay, or within the limits of the Pilotage Ground hereinafter mentioned.

Vessels of 200 tons and upwards, if boarded beyond the following, bearings, shall pay additional Pilotage, as under:—

	West of Oxwich Point, bearing N.N.E. South of Sker Buoy. bearing E.N.E. or W.S.W.		West of Worm's Head bearing N.N.E.	
	s.	d.	£	s. d.
Vessels 200 tons and under	300	.... 5 0	.... 0 6 0	
Vessels 300 tons and under	400	.... 7 6	.... 0 10 0	
Vessels 400 tons and under	500	.... 10 0	.... 0 15 0	
Vessels 500 tons and under	600	.... 12 6	.... 1 0 0	
Vessels 600 tons and under	700	.... 15 0	.... 1 5 0	
Vessels 700 tons and upwards		.... 18 6	.... 1 10 0	

Swansea, continued.

OPTIONAL PILOTAGE.—Masters of vessels under 500 tons register requiring Pilots to take their vessels to the Mumbles Roads, or clear of the Green Grounds, to pay, in addition to the Outward Pilotage Rates, the following additional rates, including landing:—

	s.	d.
Vessels under 100 tons	4	0
Vessels 100 tons and under 200	5	6
Vessels 200 tons and under 300	7	6
Vessels 300 tons and under 400	9	6
Vessels 400 tons and under 500	11	0

Masters of vessels requiring Pilots to take their vessels to the Eastern or Western Limits, to pay, in addition to the Outward Rates, the following additional rates, including landing:—

	£	s.	d.
Vessels 300 tons and under 500	3	0	0
Vessels 500 tons and under 700	4	0	0
Vessels 700 tons and under 900	5	0	0
Vessels 900 tons and upwards	6	0	0

The following shall be deemed to be the limits of the Pilotage Ground of Pilots appointed and licensed by the Swansea Harbour Trustees, viz.:—"North of the line of the Nash Lights in one;" and "east of an imaginary line running north and south of a point, four miles westward of the Helwick Light Vessel, placed off the Helwick Shoal, near the Worm's Head, in the County of Glamorgan."

Every Pilot required to remain on board a vessel, whether inward or outward bound, to be paid by the Master of such vessel, at the rate of 4s. for every twelve hours, or broken portion of twelve hours, in which such Pilot shall not have earned pilotage or distance-money, in the same vessel.

Harbour Pilotage.

	s.	d.
Vessels under 100 tons	2	6
Vessels 100 tons and under 200	3	6
Vessels 200 tons and under 400	5	0
Vessels 400 tons and under 500	7	6
Vessels 500 tons and upwards	12	0

If the master of any vessel shall require any Pilot to go on board and take his vessel out of the Harbour, transport or move her, and such vessel be not ready to be taken out or moved, half the rates last mentioned shall be paid to the Pilot.

Masters of vessels requiring Hobbler or Boats, to assist in removing vessels within the Harbour, shall pay each Hobbler employed, 2s., and for each Boat, 2s. 6d.

TENBY.**Tonnage Rates.**

Vessels discharging.....	3d. per ton register
Vessels wind bound.....	1½d. „
Yachts 7.	2d. „ or 6d. per ton yearly
Trawlers	2d. „ or 40s. yearly
Pilot Boats exempt.	

WATCHET.

Harbour Dues.—One halfpenny per ton registered tonnage.

VALUE IN BRITISH CURRENCY OF THE MONEYS OF ALL NATIONS.

AMERICA, U.S.

	£	s.	d.
Eagle	2	1	0
Half Eagle	1	0	6
Dollar	0	4	2

AUSTRIA.

Ducat.....	0	9	4
Silver Florin.....	0	2	0
Dollar.....	0	4	0
Zwanzigr, 20 Kreutzers ...	0	0	8

BELGIUM.

Gold Leopold	0	19	10
— 10 Franc Piece	0	7	10
Silver 5 Franc.....	0	3	11
— 1 Franc.....	0	0	9½

BREMEN.

Louis d'or	0	16	0
Gold Rigsbank Dollar	0	3	4
36 Groas Piece	0	1	6

BRAZILS.

Gold Piece, 6400 Reis	1	15	9
— 4000 —	1	0	0
Silver ditto, 1200	0	4	2
— 960 —	0	4	1
— 640 —	0	2	9
— 320 —	0	1	4
— 200 —	0	0	8

DENMARK.

	£	s.	d.
Christian d'or	0	16	3
Silver Specie	0	4	4
Rigsbank Daler	0	2	2
Mark	0	0	4½

EGYPT.

Gold New Sequin	0	10	4
Silver New Piastre.....	0	3	4
— Grush	0	1	2

EAST INDIES.

Gold Mohur	1	9	0
Sicca Rupee.....	0	1	10½

FRANCE.

Gold Napoleon	0	16	0
Silver 5-Franc Piece	0	4	0
— Franc	0	0	9½

GREECE

40-Drachmi Gold Piece ...	1	10	6
Five ditto	0	3	9
1 Drachmi, 100 Leplas	0	0	8½

GERMANY.

Gold Louis d'or	0	16	1
— Ducat	0	9	3
Silver Crown	0	4	4
Florin	0	1	8

HOLLAND.

	£	s.	d.
Gold 10-Florin Piece.....	0	16	6
— Ducat	0	9	3
Silver Florin or Guilder ...	0	1	8

HAMBURG and LUBEC.

Ducat.....	0	9	3
Dollar.....	0	4	4
Mark	0	1	2½

HANOVER, BRUNSWICK, &c.

Gold George d'or Double...	1	12	4
Ditto, Single	0	16	2
Thaler, 30 Groschen	0	2	11

MEXICO.

Gold Doubloon	3	5	0
— Half ditto	1	12	6
— Quarter ditto	0	16	3
— Sixteenth ditto.....	0	4	0
Silver Dollar	0	4	2
— Half ditto	0	2	1
— Quarter ditto	0	1	0½
— Eighth ditto	0	0	6½

NAPLES.

Gold Piece of 30 Ducats ...	5	0	0
Silver Ducat	0	3	4
— Dollar	0	4	0

NORWAY.

Spanish Dollar	0	4	4
Rigsbank Dollar	0	2	2
Mark	0	0	9½

POLAND.

Gold Ducat	0	9	0
Rix Dollar	0	4	0
Florin.....	0	0	5½

PORTUGAL.

Gold Joannose, 100 Reis.....	1	16	0
Silver Crown, 1000 Reis ...	0	4	8
— Crusado 400 Reis ...	0	2	3

PRUSSIA.

	£	s.	d.
Gold Frederick	0	16	9
Silver Thaler	0	3	0
Silbergroschen	0	0	1½

ROME.

Gold 10-Scudi Piece	2	2	6
Silver Scudo, 10 Paoli	0	4	2
Paoli, 10 Bajochi	0	0	5

RUSSIA.

Gold Half Imperial	0	16	3
Ducat.....	0	9	2
Silver Rouble	0	3	2

SAXONY.

August d'or	0	16	2
Thaler Specie	0	3	11
— Currency	0	3	0

SPAIN.

Gold Doubloon.....	3	6	6
— Pistole	0	16	6
Silver Dollar.....	0	4	3

SWEDEN.

Gold Ducat	0	9	2
Silver Species	0	4	4
— Half Species.....	0	2	2
Rix Dollar Banco, 48 Sk....	0	1	8

SWITZERLAND.

Gold Double Pistole	1	17	0
Four-Franc Piece	0	4	8
1-Franc do., 10 Batzen.....	0	1	1½

TURKEY.

Gold New Double Sequin... ..	1	16	0
— Sequin	0	18	0
Spanish Dollar.....	0	4	2
Piastre, 40 Paras.....	0	0	2½

TIDAL CONSTANTS.

By the following Table, the time of High Water may be found in *Local Mean Time*, for any day of the year, by *adding to or subtracting from* the various Ports of reference.

GREAT BRITAIN.

West Coast, &c.				East Coast, &c.			
		H. M.				H. M.	
St. Ives	sub.	1 48	From Pembroke Dock.	Inverness	sub.	1 49	To or from London
Padstow	sub.	1 19		Aberdeen	sub.	1 7	
Boscawen	sub.	1 17		Dundee	add	0 25	
Budehaven	sub.	0 58		Perth	add	1 28	
Lundy Island ..	sub.	1 17		Leith	add	0 10	
Barnstaple Bridge	add	0 41		Berwick	add	0 11	
Appledore	add	0 11		Blyth	add	1 8	
Bideford	add	0 20		Tynemouth Bar ..	add	1 13	
Minehead	sub.	1 12		North Shields ..	add	1 16	
Bridgwater Bar ..	sub.	0 52		Newcastle	add	2 16	
Weston-super-Mare	sub.	0 48	From Bristol	Sunderland	add	1 15	To or from London
Flatholm Island ..	sub.	0 48		Seaham	add	1 17	
Portishead	sub.	0 15		Hartlepool	add	1 21	
Kingroad	sub.	0 55		Whitby	add	1 38	
Chepstow	sub.	0 1		Scarborough	add	2 4	
Carmarthen Bar ..	sub.	0 22		Flamborough head	add	2 23	
Tenby	sub.	0 32		Great Grimsby ..	add	3 29	
St. Ann's lighthouse	sub.	0 36		Hull	add	4 19	
Fishguard	add	0 24		Goole	add	5 37	
Cardigan	add	0 29		Lynn	add	3 53	
Newquay	add	0 58	To or from Pembroke Dock	Yarmouth Road ..	sub.	4 52	To or from London
Aberystwith	add	0 59		Lowestoft	sub.	4 10	
Aberdovey	add	1 28		Orfordness	sub.	2 52	
Port Madoc	add	0 58		Margate	sub.	2 27	
Caernarvon	sub.	2 2		Nore	sub.	1 37	
Holyhead	sub.	1 24		Chatham	sub.	1 5	
Amlwch	sub.	1 5		Gravesend	sub.	0 57	
Beaumaris	sub.	1 3		Woolwich	sub.	0 30	
Chester	sub.	1 5		London Docks	sub.	0 10	
Fleetwood	sub.	0 23					
Whitehaven	sub.	0 21	To or from Liverpool	South Coast.			
Douglas, I. of Man	sub.	0 23		Ramsgate	add	5 12	To or from Pembroke Dock
Ramsey	sub.	0 23		Deal	add	4 43	
Peel	sub.	0 27		Folkstone	add	4 35	
Kircudbright	sub.	0 25		Hastings	add	4 21	
Ardrossan	add	0 10		Beachy Head	add	4 48	
Glasgow	add	1 50		Shoreham	add	5 2	

Tidal Constants, continued.

		H. M.			H. M.
Arundel Bar ..	add	5 3	To or from Pembroke Dock	Lyme Regis ..	sub. 0 11
Littlehampton ..	add	5 4		Exmouth ..	sub. 0 11
Chichester ..	add	4 58		Torbay ..	sub. 0 32
Bembridge Point ..	add	4 28		Teignmouth ..	sub. 0 32
Portsmouth ..	add	5 9		Dartmouth ..	sub. 0 16
Southampton ..	add	3 58		Devonport ..	sub. 0 49
West Cowes ..	add	4 13		Plymouth Break ..	sub. 0 55
Yarmouth ..	add	3 28		Fowey ..	sub. 1 18
Needles Point ..	add	3 14		Mevagizey ..	sub. 1 28
Christchurch ..	add	2 28		Falmouth ..	sub. 1 35
Poole ..	add	2 38		Lizard ..	sub. 1 32
Portland ..	add	0 29		Penzance ..	sub. 2 2
Bridport ..	sub.	0 27		Scilly I. (St. Mary) ..	sub. 2 5

IRELAND.

Skull ..	sub.	2 30	To or from Pembroke Dock	Tor Point ..	sub. 1 55	From Liverpool
Crookhaven ..	sub.	2 28		Lough Larne ..	sub. 0 47	
Dunmanus Harb. ..	sub.	2 35		Belfast ..	sub. 0 52	
Dunbeacon ..	sub.	2 41		Donaghadee ..	sub. 0 22	
Black Ball harbour ..	sub.	2 52		Lough Strangford ..	sub. 0 42	
Castletown ..	sub.	2 18		Warren Point ..	sub. 0 25	
Bantry Harbour ..	sub.	2 45		Carlingford Bar ..	sub. 0 55	
West Cove ..	sub.	2 40		Howth Harbour ..	sub. 0 26	
Valentia Harbour ..	sub.	2 50		Dublin Bar ..	sub. 0 28	To or from Pembroke Dock
Kilbaha ..	sub.	2 16		Kingstown ..	sub. 0 25	
Kilrush ..	sub.	1 50		Wicklow ..	sub. 1 6	
Carrigaholt ..	sub.	1 48		Arklow ..	sub. 2 50	
Tarbert ..	sub.	1 35		Wexford ..	add. 0 49	
Foyne's Island ..	sub.	0 57		New Ross ..	sub. 0 28	
Mellon ..	sub.	0 31		Waterford (bridge) ..	sub. 0 26	
Limerick ..	sub.	0 16		Do. (Duncan Fort) ..	sub. 1 12	
Galway ..	sub.	1 57		Dunmore ..	sub. 1 5	
Roundstone ..	sub.	2 4		Ballinacourty, Dun-		
Achillbeg ..	sub.	1 18		garven ..	sub. 1 20	
Broadhaven Harb. ..	sub.	1 32		Youghal ..	sub. 1 18	
Westport ..	sub.	1 35		Ballycotton ..	sub. 1 38	
Sligo Bay ..	sub.	1 14		Cork ..	sub. 1 34	
Donegal Harbour ..	sub.	1 14		Queenstown ..	sub. 1 31	
Killibegs ..	sub.	1 16		Kinsale ..	sub. 1 49	
Lough Rossmore ..	sub.	1 12		Courtmaeskerry ..	sub. 1 56	
Sheephaven ..	sub.	1 0		Castletownsend ..	sub. 2 11	
Londonderry ..	add	1 29		Baltimore ..	sub. 2 9	
Coleraine ..	sub.	0 8		Cape Clear ..	sub. 2 32	

Tidal Constants, continued.
FOREIGN AND COLONIAL.

	H. M.		H. M.
Adelaide, port, Aus.	sub. 0 48	Ichabo	sub. 5 32
Aden, Arabia ..	add 3 13	Jackson, Port ..	add 1 43
Auckland	add 0 33	Jersey, St. Hellier	sub. 4 7
Bayonne Bar. Fr.	sub. 2 47	Malaga	add 5 28
Bilbao, Spain ..	sub. 3 32	Malo, St.	sub. 0 27
Bombay	add 5 8	Melbourne	sub. 5 12
Bordeaux	add 0 18	Moreton Bay ..	add 2 58
Boston, U.S. ..	add 4 55	Natal, Port.. ..	sub. 2 2
Botany Bay	add 1 43	Nelson, New Zea.	add 3 18
Boulogne	add 4 53	New York	add 1 41
Brest.. ..	sub. 2 45	Oporto	sub. 4 2
Buenos Ayres ..	add 5 28	Ostend	add 5 53
Cadiz, Spain ..	sub. 4 47	Pernambuco ..	sub. 2 9
Calais	add 5 17	Philadelphia ..	sub. 5 14
Calcutta	sub. 4 2	Philip, Port, entr.	sub. 5 2
Callao Bay.. ..	sub. 0 45	Portland, U.S. ..	add 4 53
Canton River, ent.	add 3 28	Quebec	add 0 6
Charlestown, U.S.	add 0 41	Richmond, U.S..	sub. 2 4
Cherbourg	add 1 17	Rio Janeiro.. ..	sub. 3 32
Copiapo	add 1 58	Rochelle	sub. 3 1
Coquimbo	add 2 36	Royal, Port.. ..	add 4 28
Delaware, U.S. ..	add 1 28	Rotterdam	sub. 2 47
Dieppe	add 4 34	Rouen.. ..	sub. 4 4
Francisco, San ..	add 4 2	Savannah, City ..	add 1 41
Galle, Point de ..	sub. 4 32	Senegal	add 3 58
Gambia River ..	add 1 38	Singapore	add 3 13
Geelong	sub. 3 42	Suez Bay	sub. 4 32
Gibraltar	sub. 4 12	Sydney, Australia	add 2 6
Guernsey, St. Peter	add 0 16	Table Bay	sub. 3 52
Hamburg	sub. 1 3	Tangier	sub. 4 50
Hong Kong	add 3 43	Ushant	sub. 3 0
Horn, Cape.. ..	sub. 2 22	Valparaiso	add 3 0

To or from Pembroke Dock

To or from Pembroke Dock

MOON'S RISING AND SETTING.

At four days old it sets at, and shines till, about 10 at night.	16 at a quarter after	7
5	17 at half after	8
6	18	10
7 at near 1 in the morning.	19	11
14 at full it rises about 6 in the evening.	20	12

PEARSE & BROWN, Machine-Printers, 22, Wind-street, Swansea.

THE
BRISTOL CHANNEL
ALMANACK
AND
TIDE TABLES;
TOGETHER WITH
PORT CHARGES,
PILOTAGE REGULATIONS,
&c., &c.,
FOR THE YEAR
1865.

This Year's issue contains important additions of Astronomical Tables, sufficient for all ordinary purposes of Navigation.

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PREFACE.

IMPORTANT additions have been made to this year's issue of the Bristol Channel Almanack and Tide Tables, in a set of Solar and Lunar Tables sufficient for all ordinary purposes of Navigation; this it is hoped will materially add to the utility of the work.

In the Times and Heights of High Water, calculations have been made for Briton-Ferry, and added to the present edition.

The Port Charges, &c., have been collected with as much care as circumstances would permit, but should any errors or omissions be discovered, the Publishers will be glad to have them pointed out, that they may be corrected in future years; and any suggestions for the improvement of the work will also be gladly received, as it is their desire to make it in every respect as accurate and complete as possible.

The work now comprises:—

Calendar and Astronomical Tables ..pages	4 to 15
Tide Tables	pages 16 to 63
Port Charges, &c.	pages 64 to 101
Tidal Constants.....	pages 102 to 104

Swansea, Nov., 1864.

EXPLANATION.

THE TIDES in this work are calculated for GREENWICH MEAN TIME, and the Height for that Tide nearest mid-day at the following places:—

BARNSTAPLE.—The Bar.

BRIDGWATER.—The Bridge. The Time of high water at Bridgwater Bar is about 40 minutes earlier. The depth of water at Cumbwitch Pill is 7 to 8 feet more than in the Tables.

BRISTOL.—Cumberland Gates. The height at Bathurst Gates is 9 feet 2 inches less than in the Tables.

BRITON-FERRY.—Neath Bar. At Vale of Neath Railway Wharf, the depth is 8 inches less than in the Tables; at Giant's Grave, 2 feet 6 inches less; Crown Works, and Neath Abbey 4 feet 6 inches less; Neath, 5 feet 6 inches less.

CARDIFF.—East Dock Sill. At the West Dock, the depth is 3 feet less than in the Tables; at the Glamorganshire Canal, 13 feet less.

GLOUCESTER.—Entrance to the Canal at Sharpness Point.

LLFRACOMBE.—Pier Head.

LLANELLY.—Dock Gates. At Burry Bar the depth of water is 8 feet more than in the Tables.

NEWPORT.—Dock Gates, which are about 40 feet above the bed of the river.

MILFORD HAVEN.—The heights are the rise above low water at spring tides. The time at St. Ann's Lighthouse, is about 25 minutes earlier.

SWANSEA.—Entrance Channel. The depth of water at New Cut Bridge, is about 3 feet, and at Hafod Works, 6 feet 6 inches less than in the Tables.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Meridian Passage.		Sideral Time of the Sun's Semidiameter passing the Meridian.*	THE SUN'S					Equation of Time.	Diff. for 1 hour						
					Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi-diameter.									
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s
1	Sun	3	22.0	1	11	18	48	36	22	59	3 S.	12.82	16	18	4	0	1.183
2	Mon	4	14.4	1	11	18	53	0	22	53	42	13.96	16	18	4	28	1.166
3	Tue	5	6.1	1	11	18	57	25	22	47	54	15.09	16	18	4	56	1.148
4	Wed	5	57.6	1	11	19	1	49	22	41	38	16.22	16	18	5	23	1.130
5	Thu	6	49.6	1	11	19	6	12	22	34	56	17.34	16	18	5	50	1.111
6	Fri	7	42.5	1	11	19	10	35	22	27	47	18.45	16	18	6	16	1.091
7	Sat	8	36.2	1	11	19	14	57	22	20	11	19.55	16	18	6	42	1.070
8	Sun	9	30.4	1	11	19	19	19	22	12	9	20.64	16	18	7	8	1.048
9	Mon	10	24.2	1	11	19	23	41	22	3	41	21.72	16	18	7	32	1.025
10	Tue	11	16.9	1	10	19	28	2	21	54	47	22.79	16	18	7	57	1.000
11	Wed	12	7.5	1	10	19	32	22	21	45	27	23.85	16	18	8	20	0.975
12	Thu	12	55.9	1	10	19	36	42	21	35	42	24.90	16	18	8	44	0.949
13	Fri	13	42.0	1	10	19	41	1	21	25	32	25.94	16	18	9	6	0.923
14	Sat	14	26.1	1	10	19	45	19	21	14	57	26.97	16	18	9	28	0.896
15	Sun	15	8.8	1	10	19	49	37	21	3	58	27.98	16	18	9	49	0.868
16	Mon	15	50.8	1	10	19	53	54	20	52	35	28.98	16	18	10	10	0.840
17	Tue	16	32.7	1	10	19	58	10	20	40	47	29.97	16	17	10	29	0.811
18	Wed	17	15.4	1	10	20	2	26	20	28	36	30.95	16	17	10	48	0.782
19	Thu	17	59.7	1	10	20	6	41	20	16	2	31.92	16	17	11	7	0.752
20	Fri	18	46.2	1	10	20	10	55	20	3	5	32.86	16	17	11	25	0.721
21	Sat	19	35.4	1	9	20	15	9	19	49	46	33.79	16	17	11	41	0.690
22	Sun	20	27.6	1	9	20	19	21	19	36	4	34.71	16	17	11	58	0.658
23	Mon	21	22.4	1	9	20	23	33	19	22	0	35.61	16	17	12	13	0.626
24	Tue	22	19.2	1	9	20	27	44	19	7	35	36.50	16	17	12	28	0.594
25	Wed	23	16.8	1	9	20	31	55	18	52	49	37.37	16	17	12	42	0.561
26	Thu	conjunc		1	9	20	36	4	18	37	42	38.22	16	17	12	55	0.528
27	Fri	0	14.1	1	9	20	40	13	18	22	15	39.05	16	16	13	7	0.494
28	Sat	1	10.4	1	9	20	44	21	18	6	28	39.87	16	16	13	18	0.460
29	Sun	2	5.5	1	9	20	48	28	17	50	22	40.67	16	16	13	29	0.425
30	Mon	2	59.5	1	8	20	52	35	17	33	57	41.45	16	16	13	39	0.390
31	Tue	3	52.8	1	8	20	56	40	17	17	13	42.22	16	16	13	48	0.355

Subtract from Mean Time. — Add to Apparent Time.

* Mean Time may be found by subtracting 0^s.19 from the *Sidereal*.† The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Meridian Passage.		Sideral Time of the Sun's Semidiameter passing the Meridian.*	THE SUN'S								Equation of Time.	Diff. for 1 hour						
					Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi-diameter. †												
h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s					
1	Wed	4	46	0	1	8	21	0	45	17	0	11 S.	42	97	16	16	13	56	0	320
2	Thu	5	39	4	1	8	21	4	49	16	42	51	43	70	16	16	14	3	0	284
3	Fri	6	33	1	1	8	21	8	52	16	25	14	44	42	16	15	14	9	0	249
4	Sat	7	26	8	1	8	21	12	54	16	7	19	45	12	16	15	14	15	0	214
5	Sun	8	20	0	1	8	21	16	55	15	49	9	45	80	16	15	14	20	0	180
6	Mon	9	12	2	1	8	21	20	56	15	30	42	46	46	16	15	14	24	0	146
7	Tue	10	2	7	1	8	21	24	55	15	11	59	47	11	16	15	14	27	0	112
8	Wed	10	51	3	1	7	21	28	54	14	53	1	47	74	16	15	14	29	0	078
9	Thu	11	37	8	1	7	21	32	52	14	33	48	48	35	16	14	14	31	0	045
10	Fri	12	22	4	1	7	21	36	49	14	14	20	48	95	16	14	14	31	0	012
11	Sat	13	5	6	1	7	21	40	46	13	54	38	49	53	16	14	14	31	0	020
12	Sun	13	47	9	1	7	21	44	42	13	34	43	50	09	16	14	14	30	0	052
13	Mon	14	29	9	1	7	21	48	37	13	14	34	50	64	16	14	14	29	0	083
14	Tue	15	12	2	1	7	21	52	31	12	54	12	51	17	16	13	14	26	0	113
15	Wed	15	55	4	1	7	21	56	24	12	33	38	51	69	16	13	14	23	0	143
16	Thu	16	40	3	1	7	22	0	17	12	12	52	52	18	16	13	14	20	0	172
17	Fri	17	27	3	1	6	22	4	9	11	51	53	52	66	16	13	14	15	0	201
18	Sat	18	16	8	1	6	22	8	1	11	30	44	53	12	16	13	14	10	0	229
19	Sun	19	8	8	1	6	22	11	51	11	9	23	53	57	16	12	14	4	0	256
20	Mon	20	3	0	1	6	22	15	41	10	47	52	54	00	16	12	13	58	0	283
21	Tue	20	58	8	1	6	22	19	31	10	26	11	54	41	16	12	13	51	0	309
22	Wed	21	55	4	1	6	22	23	20	10	4	20	54	80	16	12	13	43	0	335
23	Thu	22	52	2	1	6	22	27	8	9	42	20	55	18	16	11	13	35	0	360
24	Fri	23	48	5	1	6	22	30	56	9	20	12	55	54	16	11	13	26	0	385
25	Sat	conjunc			1	6	22	34	43	8	57	55	55	88	16	11	13	16	0	409
26	Sun	0	44	4	1	6	22	38	29	8	35	29	56	20	16	11	13	6	0	432
27	Mon	1	40	0	1	6	22	42	15	8	12	57	56	50	16	11	12	55	0	455
28	Tue	2	35	4	1	5	22	46	0	7	50	17	56	79	16	10	12	44	0	478

* Mean Time may be found by subtracting 0^s.18 from the *Sidereal*.

† The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's		Sideral Time of the Sun's Semidi- ameter passing the Meridian.*	THE SUN'S							Equation of Time.	Diff. for 1 hour			
					Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter.‡								
h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s	
1	Wed	3	30·9	1	5	22	49	45	7	27	31 S.	57·06	16	10	12 32	0·500
2	Thu	4	26·5	1	5	22	53	29	7	4	38	57·31	16	10	12 20	0·521
3	Fri	5	21·7	1	5	22	57	13	6	41	39	57·55	16	10	12 7	0·541
4	Sat	6	16·1	1	5	23	0	57	6	18	35	57·77	16	9	11 54	0·561
5	Sun	7	9·0	1	5	23	4	39	5	55	26	57·98	16	9	11 41	0·580
6	Mon	8	0·0	1	5	23	8	22	5	32	12	58·17	16	9	11 26	0·598
7	Tue	8	48·9	1	5	23	12	4	5	8	53	58·34	16	8	11 12	0·616
8	Wed	9	35·6	1	5	23	15	45	4	45	31	58·50	16	8	10 57	0·633
9	Thu	10	20·4	1	5	23	19	27	4	22	5	58·64	16	8	10 41	0·649
10	Fri	11	3·8	1	5	23	23	7	3	58	36	58·77	16	8	10 26	0·663
11	Sat	11	46·2	1	5	23	26	48	3	35	4	58·88	16	7	10 10	0·676
12	Sun	12	28·5	1	5	23	30	28	3	11	29	58·93	16	7	9 53	0·688
13	Mon	13	10·5	1	5	23	34	8	2	47	52	59·06	16	7	9 37	0·699
14	Tue	13	53·5	1	5	23	37	47	2	24	14	59·13	16	7	9 20	0·710
15	Wed	14	37·7	1	5	23	41	27	2	0	34	59·18	16	6	9 2	0·720
16	Thu	15	23·7	1	5	23	45	6	1	36	52	59·22	16	6	8 45	0·729
17	Fri	16	11·6	1	5	23	48	45	1	13	10	59·25	16	6	8 27	0·737
18	Sat	17	1·5	1	5	23	52	24	0	49	28	59·26	16	6	8 10	0·743
19	Sun	17	53·3	1	5	23	56	2	0	25	46	59·25	16	5	7 52	0·749
20	Mon	18	46·6	1	4	23	59	41	0	2	4 S.	59·23	16	5	7 34	0·754
21	Tue	19	40·8	1	4	0	3	19	0	21	38 N	59·19	16	5	7 16	0·758
22	Wed	20	35·6	1	4	0	6	58	0	45	18	59·14	16	5	6 57	0·761
23	Thu	21	30·7	1	4	0	10	36	1	8	57	59·07	16	4	6 39	0·764
24	Fri	22	25·9	1	4	0	14	14	1	32	34	58·99	16	4	6 21	0·766
25	Sat	23	21·5	1	4	0	17	52	1	56	9	58·89	16	4	6 2	0·767
26	Sun	conjunc		1	4	0	21	30	2	19	41	58·78	16	3	5 44	0·767
27	Mon	0	17·6	1	4	0	25	9	2	43	11	58·65	16	3	5 26	0·767
28	Tue	1	14·5	1	4	0	28	47	3	6	37	58·50	16	3	5 7	0·766
29	Wed	2	12·0	1	4	0	32	25	3	29	59	58·34	16	3	4 49	0·764
30	Thu	3	9·5	1	4	0	36	3	3	53	18	58·16	16	2	4 30	0·762
31	Fri	4	6·5	1	4	0	39	41	4	16	32	57·97	16	2	4 12	0·759

* Mean Time may be found by subtracting 0s·18 from the *Sidereal*.

† The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

APRIL, 1865.

7

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Meridian Passage.		Sider'l Time of the Sun's Semidi- ameter pass- ing the Meri- dian.*	THE SUN'S							Equation of Time.	Diff. for 1 hour				
					Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter. †									
h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s		
1 Sat		5	1·8	1	4	0	43	20	4	39	41 N	57·77	16	2	3	54	0·755
2 Sun		5	54·9	1	5	0	46	58	5	2	46	57·55	16	1	3	36	0·751
3 Mon		6	45·3	1	5	0	50	37	5	25	44	57·32	16	1	3	18	0·746
4 Tue		7	33·1	1	5	0	54	16	5	48	37	57·07	16	1	3	0	0·740
5 Wed		8	18·6	1	5	0	57	54	6	11	24	56·81	16	1	2	42	0·733
6 Thu		9	2·3	1	5	1	1	33	6	34	5	56·53	16	0	2	25	0·726
7 Fri		9	44·8	1	5	1	5	13	6	56	38	56·24	16	0	2	8	0·718
8 Sat		10	26·9	1	5	1	8	52	7	19	5	55·94	16	0	1	51	0·708
9 Sun		11	9·0	1	5	1	12	32	7	41	24	55·62	15	59	1	34	0·698
10 Mon		11	51·8	1	5	1	16	12	8	3	35	55·29	15	59	1	17	0·687
11 Tue		12	35·8	1	5	1	19	52	8	25	38	54·95	15	59	1	1	0·675
12 Wed		13	21·5	1	5	1	23	32	8	47	33	54·58	15	59	0	45	0·662
13 Thu		14	8·9	1	5	1	27	13	9	9	19	54·22	15	58	0	29	0·649
14 Fri		14	58·2	1	5	1	30	54	9	30	56	53·84	15	58	0	13	0·635
15 Sat		15	49·0	1	5	1	34	36	9	52	24	53·44	15	58	0	2	0·620
16 Sun		16	41·0	1	5	1	38	18	10	13	42	53 03	15	58	0	16	0·604
17 Mon		17	33·6	1	5	1	42	0	10	34	49	52 60	15	57	0	31	0·587
18 Tue		18	26 5	1	5	1	45	43	10	55	47	52·16	15	57	0	44	0·570
19 Wed		19	19·4	1	5	1	49	26	11	16	34	51·71	15	57	0	58	0·552
20 Thu		20	12·4	1	5	1	53	9	11	37	10	51·25	15	57	1	11	0·534
21 Fri		21	5 9	1	5	1	56	53	11	57	34	50·77	15	56	1	23	0·515
22 Sat		22	0·3	1	5	2	0	38	12	17	47	50·27	15	56	1	36	0·496
23 Sun		22	56·0	1	5	2	4	23	12	37	47	49·76	15	56	1	47	0·476
24 Mon		23	53·1	1	6	2	8	8	12	57	36	49·24	15	56	1	58	0·456
25 Tue		conjunc		1	6	2	11	54	13	17	11	48·70	15	55	2	9	0·436
26 Wed		0	51·4	1	6	2	15	40	13	36	34	48·15	15	55	2	19	0·415
27 Thu		1	50·1	1	6	2	19	27	13	55	43	47·59	15	55	2	29	0·394
28 Fri		2	48·0	1	6	2	23	14	14	14	38	47·01	15	55	2	38	0·373
29 Sat		3	44·0	1	6	2	27	2	14	33	19	46·42	15	54	2	47	0·352
30 Sun		4	37·2	1	6	2	30	51	14	51	46	45·81	15	54	2	55	0·331

* Mean Time may be found by subtracting 0^s 18 from the *Sidereal*.

† The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Meridian Passage.		Sideral Time of the Sun's Semidi- passing the Meridian.*	THE SUN'S						Equation of Time.	Diff. for 1 hour								
					Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi-diameter.												
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s			
1	Mon	5	27	4	1	2	34	39	15	9	58	N	45	19	15	54	3	3	0	310
2	Tue	6	14	6	1	2	38	29	15	27	55		44	56	15	54	3	10	0	288
3	Wed	6	59	4	1	2	42	19	15	45	37		43	91	15	53	3	17	0	266
4	Thu	7	42	5	1	2	46	9	16	3	3		43	25	15	53	3	23	0	244
5	Fri	8	24	7	1	2	50	0	16	20	13		42	58	15	53	3	28	0	221
6	Sat	9	6	7	1	2	53	52	16	37	6		41	90	15	53	3	33	0	198
7	Sun	9	49	2	1	2	57	44	16	53	44		41	20	15	52	3	38	0	175
8	Mon	10	32	9	1	3	1	36	17	10	4		40	49	15	52	3	42	0	152
9	Tue	11	18	2	1	3	5	30	17	26	7		39	77	15	52	3	45	0	128
10	Wed	12	5	4	1	3	9	23	17	41	52		39	04	15	52	3	48	0	104
11	Thu	12	54	6	1	3	13	18	17	57	20		38	29	15	52	3	50	0	080
12	Fri	13	45	6	1	3	17	13	18	12	30		37	54	15	51	3	52	0	056
13	Sat	14	37	7	1	3	21	8	18	27	22		36	77	15	51	3	53	0	031
14	Sun	15	30	3	1	3	25	4	18	41	55		35	99	15	51	3	53	0	006
15	Mon	16	22	8	1	3	29	1	18	56	9		35	20	15	51	3	53	0	018
16	Tue	17	14	9	1	3	32	58	19	10	4		34	40	15	51	3	52	0	042
17	Wed	18	6	6	1	3	36	56	19	23	40		33	58	15	50	3	51	0	066
18	Thu	18	58	1	1	3	40	55	19	36	56		32	76	15	50	3	49	0	090
19	Fri	19	50	2	1	3	44	54	19	49	52		31	92	15	50	3	47	0	114
20	Sat	20	43	3	1	3	48	53	20	2	28		31	08	15	50	3	44	0	138
21	Sun	21	38	0	1	3	52	53	20	14	43		30	22	15	50	3	40	0	161
22	Mon	22	34	5	1	3	56	54	20	26	38		29	35	15	50	3	36	0	184
23	Tue	23	32	5	1	4	0	55	20	38	12		28	47	15	49	3	31	0	206
24	Wed	conjunc			1	4	4	57	20	49	25		27	58	15	49	3	26	0	228
25	Thu	0	31	0	1	4	8	59	21	0	16		26	69	15	49	3	20	0	249
26	Fri	1	28	8	1	4	13	2	21	10	45		25	78	15	49	3	14	0	269
27	Sat	2	24	5	1	4	17	5	21	20	53		24	86	15	49	3	8	0	288
28	Sun	3	17	3	1	4	21	9	21	30	39		23	93	15	49	3	6	0	307
29	Mon	4	7	0	1	4	25	13	21	40	2		23	00	15	48	2	53	0	325
30	Tue	4	53	8	1	4	29	18	21	49	3		22	06	15	48	2	45	0	343
31	Wed	5	38	2	1	4	33	23	21	57	41		21	11	15	48	2	36	0	360

* Mean Time may be found by subtracting 0s.18 from the *Sidereal*.

† The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month. Day of the Week.		Moon's Meridian Passage.		Sideral Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S										Equation	Diff.		
					Apparent Right Ascension.			Apparent Declination.			Diff. for 1 hour	Semi- diam- eter.‡	of Time.	for 1 hour				
		h	m	m	s	°	'	"	"	'	"	m	s	s				
1	Thu	6	21.1	1	8	4	37	28	22	5	56	N	20.15	15	48	2	28	0.376
2	Fri	7	3.3	1	8	4	41	34	22	13	48		19.19	15	48	2	18	0.391
3	Sat	7	45.5	1	9	4	45	40	22	21	16		18.22	15	48	2	9	0.406
4	Sun	8	28.5	1	9	4	49	46	22	28	22		17.24	15	48	1	59	0.420
5	Mon	9	13.1	1	9	4	53	53	22	35	3		16.25	15	47	1	49	0.433
6	Tue	9	59.6	1	9	4	58	0	22	41	21		15.26	15	47	1	38	0.446
7	Wed	10	48.4	1	9	5	2	8	22	47	15		14.26	15	47	1	27	0.458
8	Thu	11	39.3	1	9	5	6	15	22	52	46		13.26	15	47	1	16	0.469
9	Fri	12	31.9	1	9	5	10	23	22	57	52		12.25	15	47	1	4	0.480
10	Sat	13	25.4	1	9	5	14	32	23	2	34		11.24	15	47	0	53	0.490
11	Sun	14	18.9	1	9	5	18	40	23	6	51		10.23	15	47	0	41	0.499
12	Mon	15	11.9	1	9	5	22	49	23	10	45		9.21	15	47	0	29	0.508
13	Tue	16	4.0	1	9	5	26	58	23	14	13		8.19	15	47	0	17	0.516
14	Wed	16	55.4	1	9	5	31	7	23	17	18		7.17	15	47	0	4	0.523
15	Thu	17	46.6	1	9	5	35	16	23	19	57		6.14	15	47	0	8	0.529
16	Fri	18	38.1	1	9	5	39	25	23	22	12		5.11	15	46	0	21	0.534
17	Sat	19	30.6	1	9	5	43	34	23	24	2		4.08	15	46	0	34	0.538
18	Sun	20	24.6	1	9	5	47	44	23	25	28		3.04	15	46	0	47	0.541
19	Mon	21	20.3	1	9	5	51	54	23	26	28		2.00	15	46	1	0	0.543
20	Tue	22	17.3	1	9	5	56	3	23	27	4		0.96	15	46	1	13	0.544
21	Wed	23	14.6	1	9	6	0	13	23	27	15		0.07	15	46	1	26	0.544
22	Thu	conjunc		1	9	6	4	22	23	27	1		1.10	15	46	1	39	0.543
23	Fri	0	11.0	1	9	6	8	32	23	26	22		2.13	15	46	1	52	0.541
24	Sat	1	5.4	1	9	6	12	42	23	25	19		3.16	15	46	2	5	0.537
25	Sun	1	57.1	1	9	6	16	51	23	23	51		4.19	15	46	2	18	0.532
26	Mon	2	45.8	1	9	6	21	0	23	21	58		5.22	15	46	2	31	0.526
27	Tue	3	31.9	1	9	6	25	9	23	19	41		6.24	15	46	2	43	0.519
28	Wed	4	16.0	1	9	6	29	18	23	16	59		7.26	15	46	2	56	0.511
29	Thu	4	58.8	1	9	6	33	27	23	13	53		8.28	15	46	3	8	0.502
30	Fri	5	41.0	1	9	6	37	35	23	10	22		9.30	15	46	3	20	0.491

* Mean Time may be found by subtracting 0s.19 from the Sidereal.

† The Semidiameter for Apparent Noon may be assumed the same as that for Mean Noon.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Meridian Passage.		Sideral Time of the Sun's Semidiameter passing the Meridian.*	THE SUN'S								Equation of Time.						
					Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi-diameter. †											
h	m	m	s	h	m	s	°	'	"	"	'	"	m	s					
1	Sat	6	23	6	1	9	6	41	44	23	6	27	N	10	31	15	46	3	31
2	Sun	7	7	2	1	9	6	45	52	23	2	8		11	31	15	46	3	43
3	Mon	7	52	5	1	9	6	49	59	22	57	24		12	31	15	46	3	54
4	Tue	8	40	0	1	9	6	54	7	22	52	17		13	31	15	46	4	5
5	Wed	9	29	9	1	9	6	58	14	22	46	46		14	30	15	46	4	15
6	Thu	10	22	0	1	9	7	2	20	22	40	51		15	29	15	46	4	25
7	Fri	11	15	8	1	8	7	6	27	22	34	32		16	27	15	46	4	35
8	Sat	12	10	4	1	8	7	10	32	22	27	50		17	24	15	46	4	44
9	Sun	13	5	0	1	8	7	14	38	22	20	45		18	20	15	46	4	53
10	Mon	13	58	8	1	8	7	18	43	22	13	16		19	16	15	46	5	2
11	Tue	14	51	7	1	8	7	22	48	22	5	25		20	12	15	46	5	10
12	Wed	15	43	8	1	8	7	26	52	21	57	11		21	07	15	46	5	18
13	Thu	16	35	7	1	8	7	30	56	21	48	34		22	01	15	46	5	25
14	Fri	17	27	8	1	8	7	34	59	21	39	35		22	94	15	46	5	32
15	Sat	18	20	7	1	8	7	39	2	21	30	13		23	86	15	46	5	38
16	Sun	19	14	9	1	8	7	43	4	21	20	30		24	77	15	46	5	44
17	Mon	20	10	1	1	8	7	47	6	21	10	24		25	68	15	46	5	49
18	Tue	21	5	9	1	8	7	51	8	20	59	57		26	57	15	46	5	54
19	Wed	22	1	5	1	8	7	55	9	20	49	9		27	46	15	47	5	58
20	Thu	22	55	8	1	8	7	59	9	20	37	59		28	34	15	47	6	2
21	Fri	23	48	1	1	8	8	3	9	20	26	29		29	20	15	47	6	5
22	Sat	conjunction			1	7	8	7	8	20	14	38		30	05	15	47	6	8
23	Sun	0	37	9	1	7	8	11	7	20	2	27		30	89	15	47	6	10
24	Mon	1	25	2	1	7	8	15	5	19	49	56		31	72	15	47	6	12
25	Tue	2	10	4	1	7	8	19	2	19	37	5		32	54	15	47	6	13
26	Wed	2	54	0	1	7	8	22	59	19	23	54		33	35	15	47	6	13
27	Thu	3	36	6	1	7	8	26	56	19	10	25		34	14	15	47	6	13
28	Fri	4	19	0	1	7	8	30	51	18	56	36		34	93	15	47	6	12
29	Sat	5	2	0	1	7	8	34	46	18	42	28		35	70	15	48	6	10
30	Sun	5	46	1	1	7	8	38	41	18	28	2		36	46	15	48	6	8
31	Mon	6	32	0	1	7	8	42	35	18	13	18		37	21	15	48	6	6

* Mean Time may be found by subtracting 0s.19 from the *Sideral*.
 † The Semidiameter for *Apparent* Noon may be assumed the same as that for *Mean* Noon.

AUGUST, 1865.

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AT GREENWICH MEAN NOON.

Day of the Week	Moon's Meridian Passage		Sideral Time of the Sun's Semidiameter passing the Meridian.*	THE SUN'S						Equation of Time.	Diff. for 1 hour
				Apparent Right Ascension.	Apparent Declination.			Diff. for 1 hour	Semi-diameter.		
					h	m	s				
Tue	7	20.1	1 7	8 46 28	17 58 16	N	37.95	15 48	6 2	0.152	
Wed	8	10 5	1 7	8 50 20	17 42 57		38.68	15 48	5 58	0.178	
Thu	9	3.1	1 6	8 54 12	17 27 20		39.39	15 48	5 54	0.204	
Fri	9	57.2	1 6	8 58 4	17 11 27		40.09	15 48	5 49	0.230	
Sat	10	52.3	1 6	9 1 54	16 55 16		40.78	15 48	5 43	0.255	
Sun	11	47.4	1 6	9 5 45	16 38 49		41.46	15 49	5 36	0.280	
Mon	12	42 0	1 6	9 9 34	16 22 6		42.12	15 49	5 29	0.304	
Tue	13	36.1	1 6	9 13 23	16 5 8		42.78	15 49	5 22	0.329	
Wed	14	29 7	1 6	9 17 11	15 47 53		43.42	15 49	5 14	0.353	
Thu	15	23 2	1 6	9 20 59	15 30 24		44.05	15 49	5 5	0.376	
Fri	16	17 0	1 6	9 24 47	15 12 39		44.67	15 49	4 55	0.399	
Sat	17	11.4	1 6	9 28 33	14 54 40		45.27	15 50	4 46	0.421	
Sun	18	6 4	1 6	9 32 19	14 36 26		45.86	15 50	4 35	0.443	
Mon	19	1.7	1 6	9 36 5	14 17 58		46.44	15 50	4 24	0.465	
Tue	19	56.7	1 5	9 39 50	13 59 16		47.01	15 50	4 13	0.486	
Wed	20	50 5	1 5	9 43 35	13 40 21		47.56	15 50	4 1	0.507	
Thu	21	42 6	1 5	9 47 19	13 21 13		48.10	15 50	3 49	0.527	
Fri	22	32 5	1 5	9 51 3	13 1 52		48.63	15 51	3 36	0.548	
Sat	23	20.2	1 5	9 54 46	12 42 19		49.14	15 51	3 22	0.568	
Sun	conjunc		1 5	9 58 29	12 22 33		49.64	15 51	3 8	0.588	
Mon	0	5.9	1 5	10 2 11	12 2 36		50.12	15 51	2 54	0.607	
Tue	0	50.0	1 5	10 5 53	11 42 27		50.59	15 51	2 39	0.626	
Wed	1	33.0	1 5	10 9 34	11 22 8		51.04	15 52	2 24	0.645	
Thu	2	15.5	1 5	10 13 15	11 1 37		51.49	15 52	2 8	0.663	
Fri	2	58.2	1 5	10 16 55	10 40 56		51.92	15 52	1 52	0.680	
Sat	3	41.6	1 5	10 20 35	10 20 5		52.33	15 52	1 36	0.697	
Sun	4	26.3	1 5	10 24 15	9 59 4		52.73	15 52	1 19	0.713	
Mon	5	12.7	1 5	10 27 54	9 37 53		53.12	15 53	1 1	0.729	
Tue	6	1.1	1 5	10 31 35	9 16 33		53.49	15 53	0 44	0.744	
Wed	6	51.5	1 4	10 35 11	8 55 5		53.85	15 53	0 26	0.759	
Thu	7	43.7	1 4	10 38 49	8 33 28		54.20	15 53	0 7	0.773	

* Mean Time may be found by subtracting 0s.18 from the Sidereal.
 † The Semidiameter for Apparent Noon may be assumed the same as that for Mean Noon.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Meridian Passage.		Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S								Equation of Time.				
					Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter. †									
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	
1	Fri	8	37.3	1	4	10	42	27	8	11	43 N	54	53	15	54	0	11
2	Sat	9	31.8	1	4	10	46	5	7	49	50	54	45	15	54	0	30
3	Sun	10	26.6	1	4	10	49	42	7	27	49	55	16	15	54	0	50
4	Mon	11	21.5	1	4	10	53	19	7	5	41	55	46	15	54	1	9
5	Tue	12	16.5	1	4	10	56	56	6	43	27	55	74	15	55	1	29
6	Wed	13	11.7	1	4	11	0	32	6	21	5	56	01	15	55	1	49
7	Thu	14	7.3	1	4	11	4	9	5	58	38	56	27	15	55	2	9
8	Fri	15	3.5	1	4	11	7	45	5	36	4	56	52	15	55	2	30
9	Sat	16	0.1	1	4	11	11	21	5	13	24	56	75	15	56	2	50
10	Sun	16	56.7	1	4	11	14	56	4	50	39	56	97	15	56	3	11
11	Mon	17	52.6	1	4	11	18	32	4	27	49	57	17	15	56	3	32
12	Tue	18	47.1	1	4	11	22	8	4	4	54	57	36	15	56	3	53
13	Wed	19	39.6	1	4	11	25	43	3	41	55	57	54	15	57	4	14
14	Thu	20	29.8	1	4	11	29	19	3	18	52	57	70	15	57	4	35
15	Fri	21	17.6	1	4	11	32	54	2	55	45	57	35	15	57	4	56
16	Sat	22	3.4	1	4	11	36	30	2	32	34	57	98	15	57	5	17
17	Sun	22	47.6	1	4	11	40	5	2	9	21	58	10	15	58	5	38
18	Mon	23	30.7	1	4	11	43	41	1	46	4	58	21	15	58	5	59
19	Tue	conjunc		1	4	11	47	16	1	22	46	58	30	15	58	6	20
20	Wed	0	13.2	1	4	11	50	52	0	59	25	58	38	15	58	6	41
21	Thu	0	55.8	1	4	11	54	28	0	36	3	58	44	15	59	7	2
22	Fri	1	39.0	1	4	11	58	3	0	12	40 N	58	49	15	59	7	23
23	Sat	2	23.1	1	4	12	1	39	0	10	45 S.	58	52	15	59	7	44
24	Sun	3	8.5	1	4	12	5	15	0	34	10	58	54	16	0	8	4
25	Mon	3	55.6	1	4	12	8	51	0	57	35	58	54	16	0	8	25
26	Tue	4	44.2	1	4	12	12	27	1	21	0	58	53	16	0	8	45
27	Wed	5	34.4	1	4	12	16	4	1	44	25	58	50	16	0	9	5
28	Thu	6	25.8	1	4	12	19	40	2	7	49	58	46	16	1	9	25
29	Fri	7	18.2	1	4	12	23	17	2	31	11	58	40	16	1	9	45
30	Sat	8	11.2	1	4	12	26	54	2	54	32	58	33	16	1	10	4

Add to Mean Time. — Subtract from Apparent Time.

* Mean Time may be found by subtracting 0^m. 18 from the *Sideral*.
 † The Semidiameter for *Apparent* Noon may be assumed the same as that for *Mean* Noon.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Meridian Passage.		Sideral Time of the Sun's Semidiameter passing the Meridian.*	THE SUN'S						Equation of Time.	Diff. for 1 hour
					Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semidiameter.				
		h m	m s	h m s	° ' "	' "	' "	' "	' "	m s	s	
1 Sun		9 48	1 412 30 32	3 17 52 S.	58°24'	16	110 24	0.795				
2 Mon		9 59.0	1 412 34 9	3 41 9	58°14'	16	210 43	0.783				
3 Tue		10 54.1	1 412 37 47	4 4 23	58°03'	16	211 1	0.770				
4 Wed		11 50.2	1 512 41 25	4 27 34	57°50'	16	211 20	0.775				
5 Thu		12 47.5	1 512 45 4	4 50 43	57°36'	16	211 37	0.740				
6 Fri		13 45.9	1 512 48 43	5 13 47	57°24'	16	311 55	0.724				
7 Sat		14 44.8	1 512 52 22	5 36 48	57°13'	16	312 12	0.707				
8 Sun		15 43.3	1 512 56 2	5 59 45	57°25'	16	312 29	0.688				
9 Mon		16 40.2	1 512 59 42	6 22 37	57°05'	16	412 45	0.669				
10 Tue		17 34.8	1 513 3 23	6 45 24	56°53'	16	413 1	0.649				
11 Wed		18 26.5	1 513 7 4	7 8 5	56°40'	16	413 16	0.628				
12 Thu		19 15.4	1 513 10 46	7 30 41	56°36'	16	413 31	0.607				
13 Fri		20 19	1 513 14 28	7 53 11	56°10'	16	513 46	0.585				
14 Sat		20 46.3	1 513 18 11	8 15 34	55°52'	16	513 59	0.562				
15 Sun		21 29.4	1 513 21 54	8 37 50	55°52'	16	514 13	0.538				
16 Mon		22 11.9	1 513 25 38	8 59 59	55°21'	16	614 25	0.513				
17 Tue		22 54.3	1 513 29 23	9 22 1	54°58'	16	614 37	0.488				
18 Wed		23 37.2	1 613 33 8	9 43 54	54°54'	16	614 49	0.463				
19 Thu		conjunc	1 613 36 54	10 5 39	54°18'	16	614 59	0.437				
20 Fri		0 21.1	1 613 40 40	10 27 15	53°50'	16	715 9	0.410				
21 Sat		1 6.2	1 613 44 27	10 48 41	53°41'	16	715 19	0.383				
22 Sun		1 52.8	1 613 48 15	11 9 58	53°00'	16	715 28	0.355				
23 Mon		2 40.8	1 613 52 3	11 31 5	52°57'	16	715 36	0.327				
24 Tue		3 30.0	1 613 55 52	11 52 1	52°12'	16	815 43	0.298				
25 Wed		4 20.1	1 613 59 42	12 12 47	51°56'	16	815 50	0.269				
26 Thu		5 10.8	1 614 3 33	12 33 21	51°18'	16	815 56	0.239				
27 Fri		6 1.8	1 614 7 24	12 53 43	50°58'	16	816 2	0.209				
28 Sat		6 53.2	1 714 11 16	13 13 53	50°16'	16	916 6	0.179				
29 Sun		7 45.0	1 714 15 8	13 33 51	49°53'	16	916 10	0.148				
30 Mon		8 37.7	1 714 19 2	13 53 35	49°08'	16	916 13	0.116				
31 Tue		9 31.8	1 714 22 56	14 13 7	48°52'	16	916 16	0.084				

* Mean Time may be found by subtracting 0.18 from the *Sidereal*.
 The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Meridian Passage		Sideral Time of the Sun's Semidiameter passing the Meridian.*	THE SUN'S					Equation of Time.	Diff. for 1 hour						
					Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi-diameter.†									
h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s		
1	Wed	10	27.7	1	7	14	26	51	14	32	24S.	47.94	16	10	16	17	0.051
2	Thu	11	25.6	1	7	14	30	47	14	51	28	47.34	16	10	16	18	0.017
3	Fri	12	25.2	1	7	14	34	43	15	10	16	46.73	16	10	16	18	0.017
4	Sat	13	25.6	1	7	14	38	41	15	28	50	46.10	16	10	16	17	0.051
5	Sun	14	25.5	1	7	14	42	39	15	47	9	45.46	16	11	16	16	0.086
6	Mon	15	23.4	1	8	14	46	38	16	5	12	44.80	16	11	16	13	0.121
7	Tue	16	18.4	1	8	14	50	38	16	22	59	44.12	16	11	16	10	0.157
8	Wed	17	9.9	1	8	14	54	38	16	40	29	43.42	16	11	16	6	0.192
9	Thu	17	58.3	1	8	14	58	40	16	57	43	42.71	16	12	16	1	0.228
10	Fri	18	44.0	1	8	15	2	43	17	14	39	41.98	16	12	15	55	0.264
11	Sat	19	27.7	1	8	15	6	46	17	31	17	41.24	16	12	15	48	0.301
12	Sun	20	10.4	1	8	15	10	50	17	47	38	40.48	16	12	15	40	0.337
13	Mon	20	52.7	1	8	15	14	55	18	3	40	39.70	16	13	15	32	0.373
14	Tue	21	35.2	1	9	15	19	1	18	19	22	38.90	16	13	15	22	0.409
15	Wed	22	18.7	1	9	15	23	8	18	34	46	38.09	16	13	15	12	0.444
16	Thu	23	3.5	1	9	15	27	16	18	49	50	37.26	16	13	15	1	0.480
17	Fri	23	49.9	1	9	15	31	24	19	4	34	36.41	16	13	14	49	0.515
18	Sat	conjunc		1	9	15	35	33	19	18	57	35.55	16	14	14	36	0.550
19	Sun	0	37.9	1	9	15	39	44	19	33	0	34.67	16	14	14	23	0.584
20	Mon	1	27.2	1	9	15	43	55	19	46	41	33.78	16	14	14	8	0.617
21	Tue	2	17.3	1	9	15	48	6	20	0	0	32.87	16	14	13	53	0.650
22	Wed	3	7.8	1	9	15	52	19	20	12	58	31.95	16	14	13	37	0.683
23	Thu	3	58.3	1	10	15	56	32	20	25	33	31.01	16	15	13	20	0.715
24	Fri	4	48.6	1	10	16	0	46	20	37	46	30.06	16	15	13	8	0.746
25	Sat	5	38.7	1	10	16	5	1	20	49	35	29.09	16	15	12	45	0.777
26	Sun	6	29.1	1	10	16	9	17	21	1	1	28.11	16	15	12	26	0.807
27	Mon	7	20.4	1	10	16	13	33	21	12	4	27.11	16	15	12	6	0.836
28	Tue	8	13.1	1	10	16	17	50	21	22	42	26.10	16	15	11	45	0.864
29	Wed	9	8.0	1	10	16	22	8	21	32	56	25.08	16	16	11	24	0.892
30	Thu	10	5.3	1	10	16	26	26	21	42	45	24.05	16	16	11	3	0.919

* Mean Time may be found by subtracting 0s.19 from the *Sideral*.
 † The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Week.	Moon's Meridian Passage.		Sider'l Time of the Sun's Semidi- ameter pass- ing the Meri- dian.*	THE SUN'S										Equation of Time.	Diff. for 1 hour	
				Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter. §									
	h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s
1 Fri	11	4.7	1	10	16	30	45	21	52	10 S.	23.00	16	16	10	40	0 946
2 Sat	12	5.1	1	10	16	35	4	22	1	9	21.95	16	16	10	17	0 972
3 Sun	13	5.2	1	10	16	39	25	22	9	42	20.88	16	16	9	54	0.997
4 Mon	14	3.3	1	11	16	43	45	22	17	50	19.81	16	16	9	29	1 021
5 Tue	14	58.2	1	11	16	48	7	22	25	32	18.72	16	16	9	5	1 045
6 Wed	15	49.7	1	11	16	52	29	22	32	48	17.62	16	17	8	39	1.068
7 Thu	16	37.9	1	11	16	56	51	22	39	38	16.51	16	17	8	13	1.090
8 Fri	17	23.4	1	11	17	1	14	22	46	0	15.35	16	17	7	47	1.110
9 Sat	18	7.1	1	11	17	5	37	22	51	56	14.27	16	17	7	20	1.129
10 Sun	18	49.8	1	11	17	10	1	22	57	25	13.14	16	17	6	53	1.147
11 Mon	19	32.2	1	11	17	14	26	23	2	26	12.00	16	17	6	25	1.164
12 Tue	20	15.2	1	11	17	18	50	23	7	0	10.85	16	17	5	57	1.180
13 Wed	20	59.4	1	11	17	23	15	23	11	7	9.70	16	17	5	28	1.194
14 Thu	21	45.2	1	11	17	27	41	23	14	46	8.54	16	17	5	0	1.207
15 Fri	22	32.8	1	11	17	32	6	23	17	57	7.38	16	18	4	30	1.218
16 Sat	23	22.1	1	11	17	36	32	23	20	40	6.22	16	18	4	1	1.228
17 Sun	conjunction		1	11	17	40	58	23	22	55	5.05	16	18	3	32	1.236
18 Mon	0	12.7	1	11	17	45	25	23	24	41	3.8	16	18	3	2	1.243
19 Tue	1	4.0	1	11	17	49	51	23	26	0	2.70	16	18	2	32	1.248
20 Wed	1	55.3	1	11	17	54	18	23	26	51	1.52	16	18	2	2	1.251
21 Thu	2	46.3	1	11	17	58	44	23	27	13	0.34	16	18	1	32	1.253
22 Fri	3	36.7	1	11	18	3	11	23	27	7	0.84	16	18	1	2	1.253
23 Sat	4	26.7	1	11	18	7	37	23	26	33	2.02	16	18	0	32	1.252
24 Sun	5	16.7	1	11	18	12	4	23	25	30	3.20	16	18	0	2	1.249
25 Mon	6	7.5	1	11	18	16	30	23	23	59	4.38	16	18	0	28	1.245
26 Tue	6	59.6	1	11	18	20	57	23	22	0	5.55	16	18	0	58	1.239
27 Wed	7	53.6	1	11	18	25	23	23	19	33	6.72	16	18	1	27	1.231
28 Thu	8	49.9	1	11	18	29	49	23	16	38	7.89	16	18	1	57	1.223
29 Fri	9	48.1	1	11	18	34	15	23	13	14	9.06	16	18	2	26	1.214
30 Sat	10	47.2	1	11	18	38	40	23	9	23	10.22	16	18	2	55	1.203
31 Sun	11	45.8	1	11	18	43	6	23	5	4	11.38	16	18	3	24	1.190

* Mean Time may be found by subtracting 0s.19 from the *Sidereal*.
 § The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

PHASES OF THE MOON.

First Quarter. 4th, 3h. 42m. p.m. | Last Quarter. 20th, 2h. 36m.
 Full Moon .. 11th, 11h. 0m. p.m. | New Moon .. 27th, 9h. 30m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgwater.					Bristol.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		
		H.	M.	H.	M.	F.	H.	M.	H.	M.	F.	H.	M.	H.	M.	F.
1	Sunday ..	8	0	8	22	27 10	9	53	10	13	15 10	9	33	9	53	3
2	Monday..	8	45	9	7	27 3	10	32	10	52	15 1	10	12	10	32	2
3	Tuesday..	9	26	9	51	26 2	11	9	11	31	13 9	10	49	11	11	3
4	Wednesday	10	14	10	37	25 1	11	54	..	12	5	11	34	11	59	2
5	Thursday..	11	1	11	30	24 0	0	19	0	47	11 0	..	0	27	2	2
6	Friday ..	..	0	5	23	4	1	20	1	57	10 2	1	0	1	37	2
7	Saturday..	0	45	1	28	23 3	2	35	3	14	10 1	2	15	2	54	2
8	Sunday ..	2	8	2	45	23 11	3	54	4	33	10 11	3	34	4	13	2
9	Monday..	3	21	3	53	24 10	5	12	5	57	12 1	4	52	5	27	2
10	Tuesday..	4	22	4	49	25 9	6	16	6	43	13 3	5	56	6	23	2
11	Wednesday	5	13	5	35	26 0	7	8	7	30	13 6	6	48	7	10	2
12	Thursday..	5	57	6	16	26 6	7	54	8	14	14 2	7	34	7	54	2
13	Friday ..	6	35	6	52	26 8	8	31	8	48	14 4	8	11	8	28	2
14	Saturday..	7	9	7	25	26 8	9	5	9	20	14 4	8	45	9	0	2
15	Sunday ..	7	42	7	59	26 4	9	37	9	52	13 11	9	17	9	32	2
16	Monday..	8	17	8	33	25 10	10	8	10	22	13 4	9	48	10	2	2
17	Tuesday..	8	49	9	5	25 2	10	37	10	51	12 6	10	16	10	31	2
18	Wednesday	9	20	9	38	24 4	11	4	11	20	11 5	10	44	11	0	2
19	Thursday..	9	54	10	13	23 6	11	34	11	53	10 5	11	14	11	33	2
20	Friday ..	10	32	10	56	22 6	..	0	13	9 2	11	53	..	..	..	2
21	Saturday..	11	25	12	0	21 9	0	41	1	13	8 2	0	21	0	53	1
22	Sunday ..	..	0	38	21 8	1	51	2	28	8 1	1	31	2	8	1	8
23	Monday..	1	19	2	1	22 4	3	6	3	47	8 11	2	46	3	27	2
24	Tuesday..	2	40	3	14	23 9	4	28	5	5	10 9	4	8	4	45	2
25	Wednesday	3	45	4	13	25 4	5	38	6	7	12 8	5	18	5	47	2
26	Thursday..	4	40	5	6	26 11	6	34	7	1	14 8	6	14	6	41	2
27	Friday ..	5	32	5	54	27 6	7	26	7	50	15 5	7	6	7	30	2
28	Saturday..	6	18	6	40	28 4	8	14	8	36	16 5	7	54	8	16	3
29	Sunday ..	7	0	7	22	28 11	8	56	9	17	17 2	8	36	8	57	3
30	Monday..	7	45	8	7	28 9	9	38	9	59	17 0	9	18	9	39	3
31	Tuesday..	8	29	8	50	28 2	10	19	10	37	16 3	9	59	10	17	3

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m — Bridgwater, *sub.* 12m. — Bristol, *sub.* 10m

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 4th, 3h. 42m. p.m. | Last Quarter. 20th, 2h. 36m. a.m.
 Full Moon .. 11th, 11h. 0m. p.m. | New Moon .. 27th, 9h. 30m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Sunday ..	8	35	8	57	21	4	9	25	9	45	30	10
2	Monday..	9	20	9	42	20	7	10	4	10	24	29	11
3	Tuesday..	10	1	10	26	19	3	10	41	11	13	28	3
4	Wednesdy	10	49	11	12	17	11	11	26	11	51	26	6
5	Thursday..	11	36	..	16	6		..	0	19	24	10	
6	Friday ..	0	5	0	40	15	8	0	52	1	29	23	9
7	Saturday..	1	20	2	3	15	7	2	7	2	46	23	8
8	Sunday ..	2	43	3	20	16	5	3	26	4	5	24	8
9	Monday..	3	56	4	28	17	7	4	44	5	19	26	1
10	Tuesday..	4	57	5	24	18	7	5	48	6	15	27	6
11	Wednesdy	5	48	6	10	19	0	6	40	7	2	28	0
12	Thursday..	6	32	6	51	19	8	7	26	7	44	28	9
13	Friday ..	7	10	7	27	19	10	8	3	8	20	29	0
14	Saturday..	7	44	8	0	19	10	8	37	8	52	29	0
15	Sunday ..	8	17	8	34	19	5	9	9	9	24	28	6
16	Monday..	8	52	9	8	18	10	9	40	9	54	27	8
17	Tuesday..	9	24	9	40	18	0	10	8	10	23	26	7
18	Wednesdy	9	55	10	13	16	11	10	36	10	52	25	3
19	Thursday..	10	29	10	48	15	11	11	6	11	25	24	0
20	Friday ..	11	7	11	31	14	8	11	45	..	22	6	
21	Saturday..	12	0	..	13	8		0	13	0	45	21	3
22	Sunday ..	0	35	1	13	13	7	1	23	2	0	21	2
23	Monday..	1	54	2	36	14	5	2	38	3	19	22	3
24	Tuesday..	3	15	3	49	16	3	4	0	4	37	24	5
25	Wednesdy	4	20	4	48	18	3	5	10	5	39	26	11
26	Thursday..	5	15	5	41	20	2	6	6	6	33	29	5
27	Friday ..	6	7	6	29	20	11	6	58	7	22	30	4
28	Saturday..	6	53	7	15	21	11	7	46	8	8	31	6
29	Sunday ..	7	35	7	57	22	8	8	28	8	49	32	6
30	Monday..	8	20	8	42	22	6	9	10	9	31	32	2
31	Tuesday..	9	4	9	25	21	9	9	51	10	9	31	4

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 4th, 3h. 42m. p.m. | Last Quarter. 20th, 2h. 36m. a.m.
 Full Moon .. 11th, 11h. 0m. p.m. | New Moon .. 27th, 9h. 30m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Sunday ..	8	10	8	32	21	8	8	45	9	7	22	2
2	Monday..	8	55	9	17	21	0	9	30	9	52	21	6
3	Tuesday..	9	36	10	1	19	10	10	11	10	36	19	8
4	Wednesday	10	24	10	47	18	8	10	59	11	22	18	7
5	Thursday..	11	11	11	40	17	6	11	46	..	..	17	6
6	Friday ..	..	..	0	15	16	9	0	15	0	50	17	3
7	Saturday..	0	55	1	38	16	8	1	30	2	13	16	9
8	Sunday ..	2	18	2	55	17	5	2	53	3	30	17	5
9	Monday..	3	31	4	3	18	5	4	6	4	38	18	4
10	Tuesday..	4	32	4	59	19	5	5	7	5	34	19	3
11	Wednesday	5	23	5	45	19	8	5	58	6	20	19	6
12	Thursday..	6	7	6	26	20	2	6	42	7	1	20	8
13	Friday ..	6	45	7	2	20	4	7	20	7	37	20	10
14	Saturday .	7	19	7	35	20	4	7	54	8	10	20	10
15	Sunday ..	7	52	8	9	20	0	8	27	8	44	19	10
16	Monday..	8	27	8	43	19	6	9	2	9	18	19	4
17	Tuesday..	8	59	9	15	18	9	9	34	9	50	18	8
18	Wednesday	9	30	9	48	17	10	10	5	10	23	17	10
19	Thursday..	10	4	10	23	16	11	10	39	10	58	17	5
20	Friday ..	10	42	11	6	15	10	11	17	11	41	16	4
21	Saturday..	11	35	..	..	15	0	..	..	0	10	15	6
22	Sunday ..	0	10	0	48	14	11	0	45	1	23	15	5
23	Monday..	1	29	2	11	15	8	2	4	2	46	15	2
24	Tuesday..	2	50	3	24	17	3	3	25	3	59	17	9
25	Wednesday	3	55	4	23	18	11	4	30	4	58	19	5
26	Thursday..	4	50	5	16	20	8	5	25	5	51	21	2
27	Friday ..	5	42	6	4	21	4	6	17	6	39	21	10
28	Saturday..	6	28	6	50	22	2	7	3	7	25	22	8
29	Sunday ..	7	10	7	32	22	10	7	45	8	7	23	4
30	Monday..	7	55	8	17	22	8	8	30	8	52	23	2
31	Tuesday..	8	39	9	0	22	0	9	14	9	35	22	6

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 4th, 3h. 42m. p.m. | Last Quarter.. 20th, 2h. 36m. a.m.
 Full Moon .. 11th, 11h. 0m. p.m. | New Moon .. 27th, 9h. 30m. a.m.

M. W. D. D.	Newport.				Swansea.				Liverpool.				London.			
	Morn.		Even.		Morn.		Even.		Morn.		Even.		Morn.		Even.	
	H. M.	H. M.	F. I.		H. M.	H. M.	F. I.		H. M.	H. M.			H. M.	H. M.		
1 Sun	9 33	9 53	30 6		8 35	8 57	22 4		..	1 46			4 15	4 37		
2 Mo	10 12	10 32	29 5		9 20	9 42	21 7		2 7	2 30			4 58	5 20		
3 Tu	10 49	11 11	27 6		10 1	10 26	20 8		2 53	3 14			5 43	6 8		
4 Wd	11 34	11 59	25 6		10 49	11 12	18 11		3 41	4 8			6 30	6 58		
5 Th	..	0 27	23 6		11 36	..	17 6		4 38	5 9			7 25	7 55		
6 Fri	1 0	1 37	22 5		0 5	0 40	16 8		5 45	6 28			8 26	9 3		
7 Sat	2 15	2 54	22 3		1 20	2 3	16 7		7 8	7 46			9 40	10 17		
8 Sun	3 34	4 13	23 4		2 43	3 20	17 5		8 21	8 53			10 56	11 33		
9 Mo	4 52	5 27	25 0		3 56	4 28	18 7		9 24	9 51			..	0 6		
10 Tu	5 56	6 23	26 9		4 57	5 24	19 9		10 15	10 37			0 38	1 6		
11 Wd	6 48	7 10	27 8		5 48	6 10	20 0		10 59	11 20			1 32	1 55		
12 Th	7 34	7 54	28 1		6 32	6 51	20 8		11 43	..			2 16	2 36		
13 Fri	8 11	8 28	28 4		7 10	7 27	20 10		0 2	0 21			2 58	3 16		
14 Sat	8 45	9 0	28 4		7 44	8 0	20 10		0 38	0 56			3 35	3 51		
15 Sun	9 17	9 32	27 10		8 17	8 34	20 5		1 12	1 29			4 8	4 24		
16 Mo	9 48	10 2	26 11		8 52	9 8	19 10		1 45	2 2			4 41	4 57		
17 Tu	10 16	10 31	25 8		9 24	9 40	19 0		2 18	2 34			5 15	5 31		
18 Wd	10 44	11 0	24 0		9 55	10 13	17 11		2 50	3 7			5 48	6 6		
19 Th	11 14	11 33	22 8		10 29	10 48	16 11		3 27	3 45			6 23	6 43		
20 Fri	11 53	..	20 11		11 7	11 31	15 8		4 7	4 31			7 2	7 24		
21 Sat	0 21	0 53	19 5		12 0	..	14 8		5 3	5 39			7 48	8 19		
22 Sun	1 31	2 8	19 4		0 35	1 13	14 7		6 20	7 1			8 56	9 34		
23 Mo	2 46	3 27	20 7		1 54	2 36	15 5		7 38	8 15			10 11	10 48		
24 Tu	4 8	4 45	23 1		3 15	3 49	17 3		8 49	9 18			11 27	..		
25 Wd	5 18	5 47	26 0		4 20	4 48	19 2		9 44	10 7			0 2	0 32		
26 Th	6 14	6 41	28 9		5 15	5 41	21 2		10 29	10 53			0 59	1 24		
27 Fri	7 6	7 30	29 11		6 7	6 29	21 11		11 17	11 40			1 47	2 10		
28 Sat	7 54	8 16	31 3		6 53	7 15	22 11		..	0 4			2 33	2 55		
29 Sun	8 36	8 57	32 4		7 25	7 57	23 8		0 26	0 46			3 18	3 39		
30 Mo	9 18	9 39	32 0		8 20	8 42	23 6		1 9	1 31			3 59	4 21		
31 Tu	9 59	10 17	31 1		9 4	9 25	22 9		1 52	2 14			4 43	5 5		

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 3rd, 1h. 9m. a.m. | Last Quarter.. 18th, 9h. 38m. p.m.
 Full Moon .. 10th, 4h. 27m. p.m. | New Moon .. 25th, 8h. 3m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgwater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Wednesday	9 10	9 33	27 1	10 56	11 14	14 11	10 36	10 54	28 10			
2	Thursday	9 53	10 13	25 8	11 33	11 53	13 1	11 13	11 33	26 2			
3	Friday ..	10 37	11 4	24 0	..	0 19	11 0	11 59	..	23 3			
4	Saturday..	11 35	..	22 9	0 50	1 24	9 6	0 30	1 4	20 11			
5	Sunday ..	0 13	1 0	22 4	2 5	2 49	8 11	1 45	2 29	20 2			
6	Monday..	1 48	2 30	22 10	3 34	4 17	9 7	3 14	3 57	21 1			
7	Tuesday..	3 10	3 42	23 10	5 0	5 53	10 10	4 40	5 15	22 10			
8	Wednesday	4 9	4 35	24 11	6 3	6 29	12 2	5 43	6 9	24 10			
9	Thursday	5 0	5 21	25 9	6 54	7 15	13 3	6 34	6 55	26 4			
10	Friday ..	5 35	5 58	26 2	7 34	7 55	13 9	7 14	7 35	27 2			
11	Saturday..	6 15	6 30	26 9	8 11	8 26	14 6	7 51	8 6	28 2			
12	Sunday ..	6 48	7 2	27 0	8 44	8 58	14 9	8 24	8 38	28 8			
13	Monday..	8 19	7 34	26 10	9 15	9 29	14 7	8 55	9 9	28 4			
14	Tuesday..	7 50	8 5	26 7	9 43	9 57	14 3	9 23	9 37	28 0			
15	Wednesday	8 19	8 34	26 0	10 10	10 23	13 6	9 50	10 3	26 10			
16	Thursday	8 49	9 5	25 2	10 36	10 51	12 6	10 16	10 31	25 4			
17	Friday ..	9 20	9 38	24 2	11 4	11 20	11 3	10 44	11 0	23 5			
18	Saturday..	9 58	10 20	23 2	11 38	12 0	10 0	11 18	11 40	21 8			
19	Sunday ..	10 42	11 10	22 1	..	0 26	8 8	..	0 6	19 9			
20	Monday..	11 46	..	21 5	0 57	1 36	7 9	0 37	1 16	18 6			
21	Tuesday..	0 30	1 17	21 11	2 21	3 4	8 5	2 1	2 44	19 4			
22	Wednesday	2 3	2 42	23 2	3 48	4 30	10 0	3 28	4 10	21 8			
23	Thursday	3 16	3 45	25 3	5 7	5 38	12 7	4 47	5 18	25 6			
24	Friday ..	4 12	4 42	27 1	6 6	6 36	14 11	5 46	6 16	28 10			
25	Saturday..	5 10	5 33	28 7	7 4	7 27	16 9	6 44	7 7	31 6			
26	Sunday ..	5 55	6 19	29 0	7 51	8 15	17 3	7 31	7 55	32 4			
27	Monday..	6 42	7 2	29 8	8 38	8 58	18 1	8 18	8 38	33 5			
28	Tuesday..	7 24	7 49	29 6	9 20	9 40	17 11	9 0	9 20	33 2			

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 3rd, 1h. 9m. a.m. | Last Quarter. 18th, 9h 38m. p.m.
 Full Moon .. 10th, 4h. 27m. p.m. | New Moon .. 25th, 8h. 3m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.						Cardiff.						Gloucester.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	9	45	10	8	20	5	10	28	10	46	29	8	11	21	11	39	27	7
2	Thursday	10	28	10	48	18	7	11	5	11	25	27	5	11	58	..	..	24	9
3	Friday ..	11	12	11	39	16	6	11	51	..	..	24	10	0	19	0	44	21	6
4	Saturday..	..	..	0	10	15	0	0	22	0	56	22	10	1	15	1	49	19	1
5	Sunday ..	0	48	1	36	14	5	1	37	2	21	22	3	2	31	3	14	18	4
6	Monday..	2	23	3	5	15	1	3	6	3	49	23	0	4	0	4	42	19	3
7	Tuesday..	3	45	4	17	16	4	4	32	5	7	24	6	5	25	6	0	21	2
8	Wednesday	4	44	5	10	17	8	5	35	6	1	26	3	6	28	6	54	23	4
9	Thursday	5	34	5	56	18	9	6	26	6	47	27	6	7	19	7	40	24	11
10	Friday ..	6	14	6	33	19	3	7	6	7	27	28	3	7	59	8	20	25	9
11	Saturday .	6	50	7	5	20	0	7	43	7	58	29	1	8	36	8	51	26	11
12	Sunday ..	7	23	7	37	20	3	8	16	8	30	29	6	9	9	9	23	27	5
13	Monday..	7	54	8	9	20	1	8	47	9	1	29	3	9	40	9	54	27	1
14	Tuesday..	8	25	8	40	19	9	9	15	9	29	28	11	10	8	10	22	26	7
15	Wednesday	8	54	9	9	19	0	9	42	9	55	28	0	10	35	10	48	25	5
16	Thursday	9	24	9	40	18	0	10	8	10	23	26	7	11	1	11	16	23	9
17	Friday ..	9	55	10	13	16	9	10	36	10	51	25	0	11	29	11	45	21	9
18	Saturday..	10	33	10	55	15	6	11	10	11	32	23	6	..	..	0	3	19	11
19	Sunday ..	11	17	11	45	14	2	11	58	..	..	21	10	0	25	0	51	17	9
20	Monday..	..	..	0	21	13	3	0	29	1	8	20	9	1	22	2	1	16	5
21	Tuesday..	1	5	1	52	13	11	1	53	2	36	21	6	2	46	3	29	17	5
22	Wednesday	2	38	3	17	15	6	3	20	4	2	23	6	4	13	4	55	19	11
23	Thursday	3	51	4	20	18	1	4	39	5	10	26	9	5	32	6	3	23	11
24	Friday ..	4	47	5	17	20	5	5	38	6	8	29	8	6	31	7	1	27	7
25	Saturday..	5	45	6	8	22	3	6	36	6	59	31	11	7	29	7	52	30	5
26	Sunday ..	6	30	6	54	22	9	7	23	7	47	32	7	8	16	8	40	31	3
27	Monday..	7	17	7	37	23	7	8	10	8	30	33	7	9	3	9	23	32	6
28	Tuesday..	7	59	8	22	23	5	8	52	9	12	33	5	9	45	10	5	32	3

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 3rd, 1h. 9m. a.m. | Last Quarter. 18th, 9h. 38m. p.m.
 Full Moon .. 10th, 4h. 27m. p.m. | New Moon .. 25th, 8h. 3m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.						Llanelly.						Milford Haven.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	9	20	9	43	20	10	9	55	10	18	21	4	9	55	10	18	20	7
2	Thursday	10	3	10	23	19	3	10	38	10	58	19	9	10	38	10	58	19	2
3	Friday ..	10	47	11	14	17	6	11	22	11	49	18	0	11	22	11	49	17	6
4	Saturday..	11	45	..	..	16	1	..	..	0	20	16	7	..	..	0	20	16	3
5	Sunday ..	0	23	1	10	15	8	0	58	1	46	16	2	0	58	1	46	15	10
6	Monday..	1	58	2	40	16	2	2	33	3	15	16	8	2	33	3	15	16	4
7	Tuesday..	3	20	3	52	17	4	3	55	4	27	17	10	3	55	4	27	17	4
8	Wednesday	4	19	4	45	18	6	4	54	5	20	19	0	4	54	5	20	18	5
9	Thursday	5	10	5	31	19	5	5	44	6	6	19	11	5	44	6	6	19	3
10	Friday ..	5	49	6	8	19	10	6	24	6	43	20	4	6	24	6	43	19	8
11	Saturday..	6	25	6	40	20	6	7	0	7	15	21	0	7	0	7	15	20	8
12	Sunday ..	6	58	7	12	20	9	7	33	7	47	21	3	7	33	7	47	20	6
13	Monday..	8	29	7	44	20	7	8	4	8	19	21	1	8	4	8	19	20	4
14	Tuesday..	8	0	8	15	20	3	8	35	8	50	20	9	8	35	8	50	20	1
15	Wednesday	8	29	8	44	19	8	9	4	9	19	20	2	9	4	9	19	19	6
16	Thursday	8	59	9	15	18	9	9	34	9	50	19	3	9	34	9	50	18	8
17	Friday ..	9	30	9	48	17	8	10	5	10	23	18	2	10	5	10	23	17	8
18	Saturday..	10	8	10	30	16	7	10	43	11	5	17	1	10	43	11	5	16	8
19	Sunday ..	10	52	11	20	15	5	11	27	11	55	15	11	11	27	11	55	15	7
20	Monday..	11	56	..	..	14	7	..	..	0	31	15	1	..	..	0	31	14	11
21	Tuesday..	0	40	1	27	15	2	1	15	2	2	15	8	1	15	2	2	15	5
22	Wednesday	2	13	2	52	16	7	2	48	3	27	17	1	2	48	3	27	16	8
23	Thursday	3	26	3	55	18	10	4	1	4	30	19	4	4	1	4	30	18	9
24	Friday ..	4	22	4	52	20	10	4	57	5	27	21	4	4	57	5	27	20	7
25	Saturday..	5	20	5	43	22	6	5	55	6	18	23	0	5	55	6	18	22	1
26	Sunday ..	6	5	6	29	22	11	6	40	7	4	23	5	6	40	7	4	22	6
27	Monday..	6	52	7	12	23	8	7	27	7	47	24	2	7	27	7	47	23	2
28	Tuesday..	7	34	7	59	23	6	8	9	8	32	24	0	8	9	8	32	23	0

The above are in Greenwich Mean Time, if local Time be required for
 Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 3rd, 1h. 9m. a.m. | Last Quarter. 18th, 9h. 38m. p.m.
 Full Moon .. 10th, 4h. 27m. p.m. | New Moon .. 26th, 8h. 3m. p.m.

M. W. D. D.	Newport.				Swansea.				Liverpool.				London.			
	Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.	
	H. M.	H. M.	F. I.		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.	
1 Wd	10 36	10 54	29 1		9 45	10 8	21 5		2 35	2 57			5 27	5 49		
2 Th	11 13	11 33	26 7		10 28	10 48	19 7		3 21	3 43			6 12	6 37		
3 Fri	11 59	..	23 6		11 12	11 39	17 6		4 6	4 37			7 0	7 24		
4 Sat	0 30	1 4	21 4		..	0 10	16 0		5 13	5 51			7 54	8 29		
5 Sun	1 45	2 29	20 7		0 48	1 36	15 5		6 37	7 22			9 8	9 48		
6 Mo	3 14	3 57	21 6		2 23	3 5	16 1		8 4	8 40			10 31	11 15		
7 Tu	4 40	5 15	23 2		3 45	4 17	17 4		9 14	9 41			11 53	..		
8 Wd	5 43	6 9	25 2		4 44	5 10	18 8		10 4	10 25			0 28	0 56		
9 Th	6 34	6 55	26 9		5 34	5 56	19 9		10 48	11 7			1 20	1 43		
10 Fri	7 14	7 35	27 6		6 14	6 33	20 3		11 24	11 44			2 4	2 23		
11 Sat	7 51	8 6	28 5		6 50	7 5	21 0		..	0 2			2 40	2 59		
12 Sun	8 24	8 38	28 11		7 23	7 37	21 3		0 16	0 34			3 15	3 30		
13 Mo	8 55	9 9	28 7		7 54	8 9	21 1		0 49	1 6			3 47	4 1		
14 Tu	9 23	9 37	28 3		8 25	8 40	20 9		1 21	1 36			4 18	4 33		
15 Wd	9 50	10 3	27 3		8 54	9 9	20 0		1 51	2 4			4 48	5 3		
16 Th	10 16	10 31	25 8		9 24	9 40	19 0		2 19	2 34			5 17	5 32		
17 Fri	10 44	11 0	23 9		9 55	10 13	17 9		2 50	3 7			5 48	6 6		
18 Sat	11 18	11 40	22 1		10 33	10 55	16 6		3 27	3 49			6 23	6 43		
19 Sun	..	0 6	20 1		11 17	11 45	15 2		4 16	4 45			7 6	7 33		
20 Mo	0 37	1 16	18 10		..	0 21	14 3		5 21	6 5			8 2	8 37		
21 Tu	2 1	2 44	19 9		1 5	1 52	14 11		6 54	7 36			9 20	10 4		
22 Wd	3 28	4 10	22 1		2 38	3 17	16 6		8 16	8 51			10 46	11 28		
23 Th	4 47	5 18	25 10		3 51	4 20	19 1		9 20	9 44			..	0 4		
24 Fri	5 46	6 16	29 1		4 47	5 17	21 5		10 6	10 30			0 34	0 59		
25 Sat	6 44	7 7	31 8		5 45	6 8	23 3		10 57	11 18			1 23	1 49		
26 Sun	7 31	7 55	32 6		6 30	6 54	23 9		11 40	..			2 13	2 34		
27 Mo	8 18	8 38	33 8		7 17	7 37	24 7		0 4	0 28			2 56	3 19		
28 Tu	9 0	9 20	33 6		7 59	8 22	24 5		0 49	1 11			3 41	4 1		

The above are in Greenwich Time, if local Mean Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 16m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 4th, 0h. 19m. p.m. | Last Quarter. 20th, 0h. 36m. p.m.
 Full Moon .. 12th, 10h. 42m. a.m. | New Moon .. 27th, 5h. 28m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.	
1	Wednesday	8 18	8 39	22 8		8 53	9 14	23 2		8 53	9 14	22 3	
2	Thursday	8 59	9 20	21 4		9 34	9 55	21 10		9 34	9 55	21 0	
3	Friday ..	9 41	10 3	19 5		10 16	10 38	19 11		10 16	10 38	19 3	
4	Saturday..	10 26	10 51	17 5		11 1	11 26	17 11		11 1	11 26	17 5	
5	Sunday ..	11 20	11 57	15 8		11 55	..	16 2		11 35	..	15 10	
6	Monday..	..	0 40	14 10		0 32	1 16	15 4		0 32	1 16	15 2	
7	Tuesday..	1 28	2 15	15 3		2 3	2 50	15 9		2 3	2 50	15 6	
8	Wednesday	2 55	3 26	16 7		3 30	4 1	17 1		3 30	4 1	16 8	
9	Thursday	3 57	4 22	17 11		4 32	4 57	18 5		4 32	4 57	17 11	
10	Friday ..	4 44	5 5	19 1		5 19	5 40	19 7		5 19	5 40	19 0	
11	Saturday..	5 26	5 43	19 8		6 1	6 18	20 2		6 1	6 18	19 6	
12	Sunday ..	6 0	6 14	20 4		6 35	6 49	20 10		6 35	6 49	20 2	
13	Monday..	6 30	6 43	20 10		7 5	7 18	21 4		7 5	7 18	20 7	
14	Tuesday..	7 0	7 14	20 11		7 35	7 49	21 5		7 35	7 49	20 8	
15	Wednesday	7 30	7 46	20 8		8 5	8 21	21 2		8 5	8 21	20 5	
16	Thursday	8 2	8 17	20 1		8 37	8 52	20 7		8 37	8 52	19 11	
17	Friday ..	8 32	8 49	19 3		9 7	9 24	19 9		9 7	9 24	19 2	
18	Saturday..	9 6	9 24	18 2		9 41	9 59	18 8		9 41	9 59	18 2	
19	Sunday ..	9 44	10 4	17 0		10 19	10 39	17 6		10 19	10 39	17 1	
20	Monday..	10 28	10 53	15 10		11 3	11 28	16 4		11 3	11 28	16 0	
21	Tuesday..	11 26	..	15 1		..	0 1	15 7		..	0 1	15 4	
22	Wednesday	0 5	0 50	15 2		0 40	1 25	15 8		0 40	1 25	15 5	
23	Thursday	1 38	2 19	16 8		2 13	2 54	17 2		2 13	2 54	16 9	
24	Friday ..	2 55	3 27	18 11		3 30	4 2	19 5		3 30	4 2	18 10	
25	Saturday..	3 57	4 25	21 0		4 32	5 0	21 6		4 32	5 0	20 9	
26	Sunday ..	4 50	5 15	22 8		5 25	5 50	23 2		5 25	5 50	22 3	
27	Monday..	5 40	6 3	23 1		6 15	6 38	23 7		6 15	6 38	22 8	
28	Tuesday..	6 26	6 48	23 9		7 1	7 23	24 3		7 1	7 23	23 3	
29	Wednesday	7 10	7 33	23 6		7 45	8 8	24 0		7 45	8 8	23 0	
30	Thursday	8 0	8 19	22 7		8 32	8 54	23 1		8 32	8 54	22 2	
31	Friday ..	8 41	9 2	21 0		9 16	9 37	21 6		9 16	9 37	20 9	

The above are in Greenwich Mean Time, if local Time be required for
 Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 4th, 0h. 19m. p.m. | Last Quarter. 20th, 0h. 36m. p.m.
 Full Moon .. 12th, 10h. 42m. a.m. | New Moon .. 27th, 5h. 28m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	8	43	9	4	22	6	9	32	9	51	32	2
2	Thursday	9	24	9	45	20	11	10	8	10	28	30	4
3	Friday ..	10	6	10	28	18	9	10	45	11	6	27	6
4	Saturday..	10	51	11	16	16	5	11	28	11	56	24	8
5	Sunday ..	11	45	..	..	14	5	..	0	29	22	3	0
6	Monday..	0	22	1	6	13	6	1	9	1	53	21	1
7	Tuesday..	1	53	2	40	14	0	2	37	3	22	21	8
8	Wednesday	3	20	3	51	15	6	4	5	4	39	23	6
9	Thursday.	4	22	4	47	17	1	5	12	5	38	25	5
10	Friday ..	5	9	5	30	18	5	6	0	6	21	27	2
11	Saturday..	5	51	6	8	19	0	6	42	6	59	28	0
12	Sunday ..	6	25	6	39	19	10	7	17	7	33	29	0
13	Monday..	6	55	7	8	20	5	7	47	8	1	29	8
14	Tuesday..	7	25	7	39	20	6	8	18	8	32	29	9
15	Wednesday	7	55	8	11	20	2	8	48	9	3	29	5
16	Thursday.	8	27	8	42	19	7	9	17	9	31	28	7
17	Friday ..	8	57	9	14	18	7	9	45	9	59	27	5
18	Saturday..	9	31	9	49	17	4	10	15	10	31	25	10
19	Sunday ..	10	9	10	29	16	0	10	48	11	6	24	2
20	Monday..	10	53	11	18	14	8	11	30	11	59	22	6
21	Tuesday..	11	51	..	..	13	10	..	0	36	21	5	0
22	Wednesday	0	30	1	15	13	11	1	18	2	2	21	6
23	Thursday.	2	3	2	44	15	7	2	46	3	27	23	8
24	Friday ..	3	20	3	52	18	2	4	5	4	41	26	11
25	Saturday..	4	22	4	50	20	7	5	12	5	40	29	11
26	Sunday ..	5	15	5	40	22	6	6	6	6	31	32	2
27	Monday..	6	5	6	28	23	0	6	56	7	21	32	11
28	Tuesday..	6	51	7	13	23	9	7	44	8	6	33	9
29	Wednesday	7	35	7	58	23	5	8	29	8	50	33	5
30	Thursday.	8	22	8	44	22	4	9	12	9	33	32	0
31	Friday ..	9	6	9	27	20	7	9	52	10	11	29	11
		10	45	11	4	27	11	10	45	11	4	27	11

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 3rd, 1h. 19m. a.m. | Last Quarter. 18th, 11h. 20m. p.m.
 Full Moon .. 11th, 4h. 27m. a.m. | New Moon .. 25th, 2h. 13m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgwater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Saturday..	9	12	9	35	25	7	10	57	11	17	13	0
2	Sunday ..	9	58	10	23	23	9	11	38	..	10	9	11
3	Monday..	10	50	11	21	22	3	0	3	0	34	8	10
4	Tuesday..	11	58	..	..	21	6	1	9	1	49	7	10
5	Wednesday	0	40	1	25	21	9	2	30	3	12	8	2
6	Thursday.	2	4	2	39	22	9	3	49	4	26	9	6
7	Friday ..	3	10	3	36	24	2	5	0	5	29	11	3
8	Saturday..	3	59	4	19	25	3	5	52	6	13	12	7
9	Sunday ..	4	40	4	57	25	10	6	34	6	51	13	4
10	Monday..	5	16	5	33	26	3	7	10	7	27	13	10
11	Tuesday..	5	50	6	4	26	9	7	45	8	1	14	6
12	Wednesday	6	21	6	38	26	11	8	17	8	34	14	8
13	Thursday.	6	52	7	8	26	10	8	48	9	4	14	7
14	Friday ..	7	25	7	40	26	6	9	20	9	35	14	2
15	Saturday .	8	59	8	16	25	11	9	51	10	7	13	5
16	Sunday ..	8	35	8	55	25	0	10	24	10	42	12	3
17	Monday..	9	16	9	39	24	0	11	0	11	20	11	0
18	Tuesday..	10	3	10	30	23	2	11	43	..	10	0	11
19	Wednesday	11	1	11	35	22	4	0	11	0	46	8	11
20	Thursday.	..	..	0	12	22	5	1	24	2	4	9	1
21	Friday ..	0	54	1	34	23	7	2	43	3	21	10	6
22	Saturday..	2	14	2	46	25	4	4	0	4	34	12	8
23	Sunday ..	3	16	3	43	27	0	5	7	5	36	14	9
24	Monday..	4	11	4	37	28	4	6	5	6	31	16	5
25	Tuesday..	5	4	5	31	29	1	6	58	7	25	17	5
26	Wednesday	5	53	6	18	29	2	7	49	8	14	17	6
27	Thursday.	6	41	7	4	28	10	8	37	9	0	17	1
28	Friday ..	7	26	7	49	28	1	9	21	9	42	16	2
29	Saturday..	8	10	8	32	26	11	10	2	10	21	14	8
30	Sunday ..	8	53	9	16	25	6	10	40	11	0	12	11

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

Quarter. 3rd, 1h. 19m. a.m. | Last Quarter. 18th, 11h. 20m. p.m.
 .. 11th, 4h. 27m. a.m. | New Moon .. 25th, 2h. 13m. p.m.

DAY.	Briton-Ferry.					Cardiff.					Gloucester.							
	Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
Monday..	9	47	10	10	18	6	10	29	10	49	27	3	11	22	11	43	24	7
Tuesday..	10	33	10	58	16	3	11	10	11	35	24	5	..	0	3	21	0	0
Wednesday..	11	25	11	56	14	4	..	0	6	22	1	0	28	1	0	18	2	2
Thursday..	..	0	33	13	4	0	41	1	21	20	10	1	34	2	14	16	7	7
Friday..	1	15	2	0	13	8	2	2	2	44	21	3	2	55	3	37	17	1
Saturday..	2	39	3	14	15	0	3	21	3	58	22	10	4	14	4	51	19	1
Sunday..	3	44	4	11	16	9	4	32	5	1	25	0	5	26	5	54	21	9
Monday..	4	34	4	54	18	1	5	24	5	45	26	9	6	17	6	38	23	11
Tuesday..	5	15	5	32	18	10	6	6	6	23	27	8	7	0	7	16	25	1
Wednesday..	5	51	6	8	19	4	6	42	6	59	28	4	7	35	7	52	25	11
Thursday..	6	25	6	39	20	0	7	17	7	33	29	1	8	10	8	26	26	11
Friday..	6	56	7	13	20	2	7	49	8	6	29	5	8	42	8	59	27	3
Saturday..	7	27	7	43	20	1	8	20	8	36	29	3	9	13	9	29	27	1
Sunday..	8	0	8	15	19	8	8	52	9	7	28	9	9	45	10	1	26	5
Monday..	8	33	8	51	18	11	9	23	9	39	27	10	10	16	10	32	25	3
Tuesday..	9	10	9	30	17	9	9	56	10	14	26	5	10	49	11	7	23	6
Wednesday..	9	51	10	14	16	6	10	32	10	52	24	10	11	25	11	46	21	6
Thursday..	10	38	11	5	15	6	11	15	11	43	23	6	..	0	8	19	11	11
Friday..	11	36	..	14	5	..	..	0	18	22	3	0	36	1	11	18	4	4
Saturday..	0	10	0	47	14	7	0	56	1	36	24	4	1	49	2	29	18	5
Sunday..	1	29	2	9	16	0	2	15	2	53	24	2	3	8	3	46	20	8
Monday..	2	49	3	20	18	2	3	32	4	6	26	11	4	25	5	0	24	1
Tuesday..	3	51	4	18	20	3	4	39	5	8	29	6	5	32	6	1	27	5
Wednesday..	4	46	5	12	21	11	5	37	6	3	31	6	6	30	6	56	29	11
Thursday..	5	39	6	6	22	11	6	30	6	57	32	9	7	23	7	50	31	5
Friday..	6	28	6	53	23	0	7	21	7	46	32	11	8	14	8	39	31	7
Saturday..	7	16	7	39	22	7	8	9	8	32	32	4	9	2	9	25	30	11
Sunday..	8	1	8	24	21	8	8	53	9	14	31	3	9	46	10	7	29	7
Monday..	8	45	9	7	20	2	9	34	9	53	29	5	10	27	10	46	27	3
Tuesday..	9	28	9	51	18	5	10	12	10	32	27	2	11	5	11	25	24	5

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 3rd, 1h. 19m. a.m. | Last Quarter.. 18th, 11h. 20m. p.m.
 Full Moon .. 11th, 4h. 27m. a.m. | New Moon .. 25th, 2h. 13m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.					Llanelly.					Milford Haven.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Saturday..	9	22	9	45	19	2	9	57	10	20	19	8	9	57	10	20	19	1
2	Sunday ..	10	8	10	33	17	3	10	43	11	8	17	9	10	43	11	8	17	3
3	Monday..	11	0	11	31	15	7	11	35	..	16	1	11	35	..	15	9		
4	Tuesday..	..	0	0	8	14	8	0	6	0	43	15	2	0	6	0	43	15	0
5	Wednesday	0	50	1	35	15	0	1	25	2	10	15	6	1	25	2	10	15	3
6	Thursday.	2	14	2	49	16	1	2	49	3	24	16	7	2	49	3	24	16	3
7	Friday ..	3	20	3	46	17	8	3	54	4	21	18	2	3	54	4	21	17	8
8	Saturday..	4	9	4	29	18	10	4	44	5	4	19	4	4	44	5	4	18	9
9	Sunday ..	4	50	5	7	19	6	5	25	5	42	20	0	5	25	5	42	19	4
10	Monday..	5	26	5	43	19	11	6	1	6	18	20	5	6	1	6	18	19	9
11	Tuesday..	6	0	6	14	20	6	6	35	6	49	21	0	6	35	6	49	20	3
12	Wednesday	6	31	6	48	20	8	7	6	7	23	21	2	7	6	7	23	20	5
13	Thursday.	7	2	7	18	20	7	7	37	7	53	21	1	7	37	7	53	20	4
14	Friday ..	7	35	7	50	20	2	8	10	8	25	20	8	8	10	8	25	20	0
15	Saturday .	8	9	8	26	19	7	8	43	9	1	20	1	8	43	9	1	19	5
16	Sunday ..	8	45	9	5	18	7	9	20	9	40	19	1	9	20	9	40	18	6
17	Monday..	9	26	9	49	17	6	10	1	10	24	18	0	10	1	10	24	17	6
18	Tuesday..	10	13	10	40	16	7	10	48	11	15	17	1	10	48	11	15	16	8
19	Wednesday	11	11	11	45	15	8	11	46	..	16	2	11	46	..	15	10		
20	Thursday.	..	0	0	22	15	9	0	20	0	57	16	3	0	20	0	57	15	11
21	Friday ..	1	4	1	44	17	0	1	39	2	19	17	6	1	39	2	19	17	1
22	Saturday..	2	24	2	56	18	11	2	59	3	30	19	5	2	59	3	30	18	10
23	Sunday ..	3	26	3	53	20	9	4	1	4	28	21	3	4	1	4	28	20	6
24	Monday..	4	21	4	47	22	2	4	56	5	22	22	8	4	56	5	22	21	10
25	Tuesday..	5	14	5	41	23	0	5	49	6	16	23	6	5	49	6	16	22	7
26	Wednesday	6	3	6	28	23	1	6	38	7	3	23	7	6	38	7	3	22	8
27	Thursday.	6	51	7	14	22	9	7	26	7	49	23	3	7	26	7	49	22	4
28	Friday ..	7	36	7	59	21	11	8	11	8	34	22	5	8	11	8	34	21	7
29	Saturday..	8	20	8	42	20	8	8	55	9	17	21	2	8	55	9	17	20	5
30	Sunday ..	9	3	9	26	19	1	9	38	10	1	19	7	9	38	10	1	19	0

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 3rd, 1h. 19m. a.m. | Last Quarter.. 18th, 11h. 20m. p.m.
 Full Moon .. 11th, 4h. 27m. a.m. | New Moon .. 25th, 2h. 13m. p.m.

M. W. D.	Newport.					Swansea.					Liverpool.				London.			
	Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.	
	H. M.	H. M.	H. M.	F. I.		H. M.	H. M.	H. M.	F. I.		H. M.	H. M.	H. M.		H. M.	H. M.	H. M.	
1 Sat	10 37	10 57	26 5			9 47	10 10	19 6			2 37	3 0			5 29	5 51		
2 Sun	11 18	11 43	23 1			10 33	10 58	17 3			3 24	3 49			6 14	6 40		
3 Mo	..	0 14	20 5			11 25	11 56	15 4			4 19	4 55			7 6	7 36		
4 Tu	0 49	1 29	19 0			..	0 33	14 4			5 35	6 19			8 11	8 51		
5 Wd	2 10	2 52	19 5			1 15	2 0	14 8			7 3	7 44			9 32	10 13		
6 Th	3 29	4 6	21 4			2 39	3 14	16 0			8 17	8 48			10 54	11 29		
7 Fri	4 40	5 9	23 9			3 44	4 11	17 9			9 14	9 36			..	0 1		
8 Sat	5 32	5 53	25 10			4 34	4 54	19 1			9 54	10 12			0 28	0 51		
9 Sun	6 14	6 31	26 11			5 15	5 32	19 10			10 29	10 44			1 11	1 29		
10 Mo	6 50	7 7	27 8			5 51	6 8	20 4			11 3	11 18			1 47	2 2		
11 Tu	7 25	7 41	28 5			6 25	6 39	21 0			11 34	11 50			2 18	2 34		
12 Wd	7 57	8 14	28 9			6 56	7 13	21 2			..	0 7			2 50	3 5		
13 Th	8 28	8 44	28 7			7 27	7 43	21 1			0 24	0 38			3 21	3 37		
14 Fri	9 0	9 15	28 1			8 0	8 15	20 8			0 55	1 12			3 51	4 7		
15 Sat	9 31	9 47	27 1			8 33	8 51	19 11			1 27	1 45			4 24	4 39		
16 Sun	10 4	10 22	25 4			9 10	9 30	18 9			2 1	2 21			4 56	5 14		
17 Mo	10 40	11 0	23 6			9 51	10 14	17 6			2 41	3 3			5 33	5 55		
18 Tu	11 23	11 51	22 1			10 38	11 5	16 6			3 28	3 55			6 18	6 44		
19 Wd	..	0 26	20 7			11 36	..	15 5			4 29	5 9			7 12	7 46		
20 Th	1 4	1 44	20 9			0 10	0 47	15 7			5 51	6 36			8 25	9 8		
21 Fri	2 23	3 1	22 10			1 29	2 9	17 0			7 16	7 51			9 47	10 25		
22 Sat	3 40	4 14	26 0			2 49	3 20	19 2			8 26	8 55			11 2	11 38		
23 Sun	4 47	5 16	28 11			3 51	4 18	21 3			9 20	9 42			..	0 7		
24 Mo	5 45	6 11	31 3			4 46	5 12	22 11			10 6	10 27			0 34	0 57		
25 Tu	6 38	7 5	32 8			5 39	6 6	23 11			10 52	11 16			1 22	1 45		
26 Wd	7 29	7 54	32 10			6 28	6 53	24 0			11 39	..			2 8	2 32		
27 Th	8 17	8 40	32 2			7 16	7 39	23 7			0 4	0 27			2 54	3 18		
28 Fri	9 1	9 22	30 11			8 1	8 24	22 8			0 51	1 13			3 40	4 3		
29 Sat	9 42	10 1	28 9			8 45	9 7	21 2			1 35	1 55			4 25	4 47		
30 Sun	10 20	10 40	26 3			9 28	9 51	19 5			2 17	2 39			5 8	5 30		

The above are in Greenwich Time, if local Mean Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 2nd, 4h. 4m. p.m. | Last Quarter. 18th, 6h. 39m. a.m.
 Full Moon .. 10th, 8h. 23m. p.m. | New Moon .. 24th, 10h. 49m. p.m.

M. D.	WEEK DAYS.	Barnstaple.						Bridgwater.						Bristol.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Monday..	9	39	10	2	24	0	11	20	11	42	11	0	11	0	11	22	23	3
2	Tuesday..	10	27	10	53	22	8	..	0	8	9	4	11	48	..	..	20	9	9
3	Wednesday	11	23	11	55	21	10	0	38	1	11	8	4	0	18	1	51	19	2
4	Thursday..	..	0	29	21	9	9	1	46	2	20	8	2	1	26	2	0	19	0
5	Friday ..	1	8	1	46	22	4	2	56	3	32	8	11	2	36	3	12	20	2
6	Saturday..	2	19	2	48	23	3	4	5	4	36	10	1	3	45	4	16	21	10
7	Sunday ..	3	15	3	36	24	3	5	5	5	29	11	4	4	45	5	9	23	7
8	Monday..	3	59	4	21	25	2	5	52	6	15	12	6	5	32	5	55	25	4
9	Tuesday..	4	41	5	0	25	10	6	35	6	54	13	4	6	15	6	34	26	6
10	Wednesday	5	18	5	36	26	2	7	12	7	31	13	9	6	52	7	11	27	2
11	Thursday..	5	55	6	11	26	6	7	51	8	8	14	2	7	31	7	48	27	10
12	Friday ..	6	29	6	46	26	8	8	25	8	42	14	4	8	5	8	22	28	1
13	Saturday..	7	3	7	22	26	6	8	59	9	17	14	2	8	39	8	57	27	10
14	Sunday ..	7	41	8	1	26	1	9	36	9	53	13	8	9	16	9	33	27	0
15	Monday..	8	22	8	42	25	7	10	13	10	38	13	0	9	53	10	9	26	0
16	Tuesday..	9	2	9	26	24	9	10	48	11	9	12	0	10	28	10	49	24	6
17	Wednesday	9	50	10	15	24	1	11	30	11	55	11	2	11	10	11	35	23	4
18	Thursday..	10	43	11	13	23	4	..	0	26	10	2	..	..	0	6	22	0	0
19	Friday ..	11	46	..	23	3	3	1	0	1	26	10	1	0	40	1	16	21	10
20	Saturday..	0	21	1	3	23	9	2	13	2	51	10	9	1	53	2	31	22	9
21	Sunday ..	1	41	2	16	25	0	3	27	4	2	12	3	3	7	3	42	25	0
22	Monday..	2	48	3	18	26	4	4	36	5	10	13	11	4	16	4	50	27	6
23	Tuesday..	3	50	4	19	27	5	5	44	6	13	15	3	5	24	5	53	29	6
24	Wednesday	4	48	5	15	28	0	6	42	7	9	16	0	6	22	6	49	30	6
25	Thursday..	5	39	6	3	28	1	7	34	8	0	16	2	7	14	7	40	30	8
26	Friday ..	6	26	6	48	28	1	8	22	8	44	16	2	8	2	8	24	30	8
27	Saturday..	7	8	7	30	27	9	9	4	9	25	15	9	8	44	9	5	30	1
28	Sunday ..	7	53	8	14	26	11	9	46	10	5	14	8	9	26	9	45	28	6
29	Monday..	8	36	8	57	25	8	10	25	10	44	13	1	10	5	10	24	26	2
30	Tuesday..	9	18	9	40	24	6	11	1	11	21	11	8	10	41	11	1	24	0
31	Wednesday	10	0	10	21	23	6	11	40	12	0	10	5	11	20	11	41	22	3

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

Quarter. 2nd, 4h. 4m. p.m. | Last Quarter. 18th, 6h. 39m. a.m.
 .. 10th, 8h. 23m. p.m. | New Moon .. 24th, 10h. 49m. p.m.

	Briton-Ferry.				Cardiff.				Gloucester.			
	Morn.	Even.	Height		Morn.	Even.	Height		Morn.	Even.	Height	
	H. M.	H. M.	F. I.		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.	
Monday..	10 14	10 37	16 6		10 52	11 14	24 10		11 46	..	21 6	
Tuesday..	11 2	11 28	14 10		11 40	..	22 9		0 7	0 33	18 11	
Wednesday..	11 58	..	13 10		0 10	0 43	21 5		1 3	1 36	17 3	
Thursday..	0 30	1 4	13 8		1 18	1 52	21 3		2 11	2 45	17 1	
Friday..	1 43	2 21	14 5		2 28	3 4	22 3		3 21	3 57	18 4	
Saturday..	2 54	3 23	15 7		3 37	4 8	23 8		4 30	5 1	20 1	
Sunday..	3 50	4 11	16 10		4 37	5 1	25 2		5 31	5 54	21 11	
Monday..	4 34	4 56	18 0		5 24	5 47	26 7		6 17	6 41	23 9	
Tuesday..	5 16	5 34	18 10		6 7	6 26	27 8		7 0	7 19	25 1	
Wednesday..	5 53	6 11	19 3		6 44	7 3	28 3		7 38	7 56	25 9	
Thursday..	6 30	6 46	19 8		7 23	7 40	28 9		8 16	8 33	26 5	
Friday..	7 4	7 21	19 10		7 57	8 14	29 0		8 50	9 7	26 9	
Saturday..	7 38	8 57	19 8		8 31	8 49	28 9		9 24	9 42	26 5	
Sunday..	8 16	8 36	19 2		9 8	9 25	28 1		10 1	10 18	25 7	
Monday..	8 57	9 17	18 6		9 45	10 1	27 3		10 38	10 54	24 7	
Tuesday..	9 37	10 1	17 6		10 20	10 41	26 0		11 13	11 34	23 0	
Wednesday..	10 25	10 50	16 8		11 2	11 27	24 11		11 55	..	21 7	
Thursday..	11 18	11 48	15 8		11 58	..	23 9		0 20	0 51	20 3	
Friday..	..	0 21	15 7		0 32	1 8	23 8		1 25	2 1	20 1	
Saturday..	0 56	1 38	16 3		1 45	2 23	24 5		2 38	3 16	21 0	
Sunday..	2 16	2 51	17 9		2 59	3 34	26 5		3 52	4 27	23 6	
Monday..	3 23	3 53	19 5		4 8	4 42	28 6		5 1	5 35	26 1	
Tuesday..	4 25	4 54	20 10		5 16	5 45	30 2		6 9	6 38	28 3	
Wednesday..	5 28	5 50	21 6		6 14	6 41	31 1		7 7	7 34	29 5	
Thursday..	6 15	6 38	21 8		7 6	7 32	31 3		7 59	8 25	29 7	
Friday..	7 1	7 23	21 8		7 54	8 16	31 3		8 47	9 9	29 7	
Saturday..	7 43	8 5	21 3		8 36	8 57	30 9		9 29	9 50	28 11	
Sunday..	8 28	8 49	20 2		9 18	9 37	29 5		10 11	10 30	27 3	
Monday..	9 11	9 32	18 7		9 57	10 16	27 5		10 50	11 9	24 9	
Tuesday..	9 53	10 15	17 2		10 33	10 53	25 6		11 26	11 46	22 5	
Wednesday..	10 35	10 56	15 11		11 12	11 33	24 0		..	0 5	20 6	

As above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 3.

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PHASES OF THE MOON.

First Quarter. 2nd, 4h. 4m. p.m. | Last Quarter. 18th, 6h 39m. a.m.
 Full Moon .. 10th, 8h. 23m. p.m. | New Moon .. 24th, 10h. 49m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.					Llanelly.					Milford Haven.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Monday..	9	49	10	12	17	6	10	24	10	47	18	0	10	24	10	47	17	6
2	Tuesday..	10	37	11	3	16	0	11	12	10	38	16	6	11	12	11	38	16	2
3	Wednesday	11	33	..	15	1	..	..	0	8	15	7	..	..	0	8	15	4	..
4	Thursday..	0	5	0	39	15	0	0	40	1	14	15	6	0	40	1	14	15	3
5	Friday ..	1	18	1	56	15	8	1	53	2	31	16	2	1	53	2	31	15	10
6	Saturday..	2	29	2	58	16	8	3	4	3	33	17	2	3	4	3	33	16	9
7	Sunday ..	3	25	3	46	17	9	4	0	4	21	18	3	4	0	4	21	17	9
8	Monday..	4	9	4	31	18	9	4	44	5	6	19	3	4	44	5	6	18	8
9	Tuesday..	4	51	5	10	19	6	5	26	5	44	20	0	5	26	5	44	19	4
10	Wednesday	5	28	5	46	19	10	6	3	6	21	20	4	6	3	6	21	19	8
11	Thursday..	6	5	6	21	20	2	6	40	6	56	20	8	6	40	6	56	20	0
12	Friday ..	6	39	6	56	20	4	7	14	7	31	20	10	7	14	7	31	20	2
13	Saturday..	7	13	7	32	20	2	7	48	8	7	20	8	7	48	8	7	20	0
14	Sunday ..	7	51	8	11	19	9	8	26	8	46	20	3	8	26	8	46	19	7
15	Monday..	8	32	8	53	19	2	9	7	9	27	19	8	9	7	9	27	19	1
16	Tuesday..	9	12	9	36	18	4	9	47	10	11	18	10	9	47	10	11	18	3
17	Wednesday	10	0	10	25	17	7	10	35	11	0	18	1	10	35	11	0	17	7
18	Thursday..	10	53	11	23	16	9	11	28	11	58	17	3	11	28	11	58	16	10
19	Friday ..	11	56	..	16	8	..	..	0	31	17	2	..	..	0	31	16	9	..
20	Saturday..	0	31	1	13	17	3	1	6	1	48	17	9	1	6	1	48	17	3
21	Sunday ..	1	51	2	26	18	7	2	26	3	1	19	1	2	26	3	1	18	6
22	Monday..	2	58	3	28	20	0	3	33	4	3	20	6	3	33	4	3	19	10
23	Tuesday..	4	0	4	29	21	3	4	35	5	4	21	9	4	35	5	4	20	11
24	Wednesday	4	58	5	25	21	10	5	33	6	0	22	4	5	33	6	0	21	6
25	Thursday..	5	49	6	13	21	11	6	25	6	48	22	5	6	25	6	48	21	7
26	Friday ..	6	36	6	58	21	11	7	11	7	33	22	5	7	11	7	33	21	7
27	Saturday..	7	18	7	40	21	7	7	53	8	15	22	1	7	53	8	15	21	3
28	Sunday ..	8	3	8	24	20	8	8	38	8	59	21	2	8	38	8	59	20	5
29	Monday..	8	46	9	7	19	3	9	21	9	42	19	9	9	21	9	42	19	2
30	Tuesday..	9	28	9	50	18	0	10	3	10	25	18	6	10	3	10	25	18	0
31	Wednesday	10	10	10	31	16	11	10	45	11	6	17	5	10	45	11	6	17	0

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 3.

PHASES OF THE MOON.

Quarter. 2nd, 4h. 4m. p.m. | Last Quarter. 18th, 6h. 39m. a.m.
 Moon .. 10th, 8h. 23m. p.m. | New Moon .. 24th, 10h. 49m. p.m.

Newport.					Swansea.					Liverpool.				London.			
Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.	
H. M.	H. M.	H. M.	F. I.		H. M.	H. M.	F. I.			H. M.	H. M.	H. M.		H. M.	H. M.	H. M.	
11 0	11 22	23 6			10 14	10 37	17 6			3 3	3 28	5 53		6 18			
11 48	..	21 2			11 2	11 28	15 10			3 54	4 24	6 44		7 11			
0 18	0 51	19 7			11 58	..	14 10			5 0	5 37	7 42		8 16			
1 26	2 0	19 5			0 30	1 4	14 8			6 16	6 53	8 53		9 29			
2 36	3 12	20 7			1 43	2 21	15 5			7 29	8 2	10 3		10 38			
3 45	4 16	22 3			2 54	3 23	16 7			8 30	8 56	11 13		11 43			
4 45	5 9	23 11			3 50	4 11	17 10			9 19	9 36	..		0 9			
5 32	5 55	25 8			4 34	4 56	19 0			9 55	10 14	0 32		0 51			
6 15	6 34	26 11			5 16	5 34	19 10			10 30	10 47	1 11		1 31			
6 54	7 11	27 6			5 53	6 11	20 3			11 4	11 21	1 48		2 4			
7 31	7 48	28 1			6 30	6 46	20 8			11 41	11 57	2 20		2 37			
8 5	8 22	28 4			7 4	7 21	20 10			..	0 15	2 56		3 12			
8 39	8 57	28 1			7 38	8 57	20 8			0 32	0 50	3 29		3 45			
9 16	9 33	27 4			8 16	8 36	20 2			1 9	1 28	4 2		4 21			
9 53	10 9	26 5			8 57	9 17	19 6			1 47	2 7	4 40		4 59			
10 28	10 49	24 11			9 37	10 1	18 6			2 28	2 48	5 20		5 40			
11 10	11 35	23 8			10 25	10 50	17 8			3 14	3 40	6 3		6 30			
..	0 6	22 5			11 18	11 48	16 8			4 10	4 47	6 57		7 27			
0 40	1 16	22 3			..	0 21	16 7			5 25	6 5	8 2		8 41			
1 53	2 31	23 1			0 56	1 38	17 3			6 45	7 24	9 20		9 56			
3 7	3 42	25 4			2 16	2 51	18 9			7 57	8 28	10 33		11 8			
4 16	4 50	27 10			3 23	3 53	20 5			8 56	9 21	11 40		..			
5 24	5 53	29 9			4 25	4 54	21 10			9 49	10 12	0 9		0 36			
6 22	6 49	30 9			5 23	5 50	22 6			10 36	11 1	1 3		1 29			
7 14	7 40	30 11			6 15	6 38	22 8			11 24	11 49	1 54		2 17			
8 2	8 24	30 11			7 1	7 23	22 8			..	0 12	2 40		3 4			
8 44	9 5	30 4			7 43	8 5	22 3			0 34	0 55	3 26		3 47			
9 26	9 45	28 9			8 28	8 49	21 2			1 16	1 39	4 7		4 29			
10 5	10 24	26 7			9 11	9 32	19 7			1 59	2 21	4 51		5 12			
10 41	11 1	24 4			9 53	10 15	18 2			2 43	3 5	5 34		5 57			
11 20	11 41	22 8			10 35	10 56	16 11			3 28	3 52	6 20		6 45			

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 16m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 1st, 8h. 22m. a.m. | Last Quarter. 16th, 11h. 53m. a.m.
 Full Moon .. 9th, 9h. 41m. a.m. | New Moon .. 23rd, 7h. 57m. a.m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgwater.					Bristol.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday	10	42	11	8	22	6	..	0	26	9	2	..	0	6	20	6		
2	Friday ..	11	35	..	..	22	0	0	54	1	24	8	6	0	34	1	4	19	6
3	Saturday..	0	5	0	36	21	11	1	57	2	27	8	5	1	37	2	7	19	4
4	Sunday ..	1	11	1	45	22	6	2	57	3	31	9	2	2	37	3	11	20	6
5	Monday..	2	17	2	46	23	3	4	3	4	34	10	1	3	43	4	14	21	10
6	Tuesday..	3	14	3	37	24	3	5	5	5	30	11	4	4	45	5	10	23	7
7	Wednesdy	4	0	4	25	25	2	5	53	6	20	12	6	5	33	6	0	25	4
8	Thursday.	4	48	5	10	25	10	6	42	7	4	13	4	6	22	6	44	26	6
9	Friday ..	5	32	5	52	26	2	7	26	7	48	13	9	7	6	7	28	27	2
10	Saturday..	6	9	6	30	26	8	8	6	8	26	14	4	7	46	8	6	28	1
11	Sunday ..	6	50	7	6	26	10	8	46	9	5	14	7	8	26	8	45	28	4
12	Monday..	7	26	7	50	26	9	9	23	9	43	14	6	9	3	9	23	28	2
13	Tuesday..	8	12	8	36	26	5	10	3	10	25	14	1	9	43	10	5	27	8
14	Wednesdy	8	57	9	19	25	10	10	44	11	3	13	4	10	24	10	43	26	6
15	Thursday.	9	42	10	6	25	3	11	23	11	46	12	7	11	3	11	26	25	6
16	Friday ..	10	31	10	56	24	6	..	0	12	11	8	11	11	52	..	..	24	0
17	Saturday..	11	23	11	56	23	10	0	41	1	12	10	10	0	21	0	52	22	10
18	Sunday ..	..	..	0	29	23	8	1	47	2	20	10	7	1	27	2	0	22	7
19	Monday..	1	6	1	44	24	3	2	54	3	30	11	4	2	34	3	10	23	7
20	Tuesday..	2	19	2	54	25	3	4	5	4	42	12	7	3	45	4	22	25	6
21	Wednesdy	3	25	3	58	26	3	5	17	5	51	13	10	4	57	5	31	27	4
22	Thursday.	4	28	4	56	27	0	6	22	6	50	14	9	6	2	6	30	28	8
23	Friday ..	5	25	5	50	27	2	7	20	7	46	15	0	7	0	7	26	29	0
24	Saturday..	6	11	6	35	27	4	8	8	8	31	15	2	7	48	8	11	29	4
25	Sunday ..	6	56	7	16	27	2	8	52	9	12	15	0	8	32	8	52	29	0
26	Monday..	7	36	7	55	26	9	9	31	9	48	14	6	9	11	9	28	28	2
27	Tuesday..	8	15	8	35	26	0	10	6	10	24	13	6	9	46	10	4	26	10
28	Wednesdy	8	53	9	10	25	3	10	40	10	56	12	7	10	20	10	36	25	6
29	Thursday.	9	30	9	49	24	3	11	13	11	30	11	4	10	53	11	10	23	7
30	Friday ..	10	8	11	26	23	4	11	43	..	10	2	11	11	28	11	46	22	0

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m — Bridgwater, *sub.* 12m. — Bristol, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 1st, 8h. 22m. a.m. | Last Quarter. 16th, 11h. 53m. a.m.
 Full Moon .. 9th, 9h. 41m. a.m. | New Moon .. 23rd, 7h. 57m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.	Even.	Height		Morn.	Even.	Height		Morn.	Even.	Height	
		H. M.	H. M.	P. I.		H. M.	H. M.	P. I.		H. M.	H. M.	P. I.	
1	Thursday..	11 17	11 43	14 8		11 58	..	22 6		0 26	0 51	18 7	
2	Friday ..	..	0 10	14 0		0 26	0 56	21 8		1 19	1 49	17 7	
3	Saturday..	0 40	1 11	18 11		1 29	2 02	21 6		2 22	2 52	17 5	
4	Sunday ..	1 46	2 30	14 8		2 29	3 32	22 6		3 22	3 56	18 7	
5	Monday..	2 52	3 21	15 7		3 35	4 6	23 8		4 28	5 0	20 1	
6	Tuesday..	3 49	4 12	16 10		4 37	5 22	25 2		5 30	5 55	21 11	
7	Wednesday	4 35	5 0	18 0		5 25	6 51	26 7		6 18	6 44	23 9	
8	Thursday..	5 23	5 45	18 10		6 14	6 36	27 8		7 7	7 29	25 1	
9	Friday ..	6 7	6 27	19 3		6 58	7 20	28 3		7 51	8 13	25 9	
10	Saturday..	6 44	7 5	19 10		7 38	7 58	29 0		8 31	8 51	26 9	
11	Sunday ..	7 25	7 41	20 1		8 18	8 37	29 3		9 11	9 30	27 1	
12	Monday..	8 3	8 25	20 0		8 55	9 15	29 2		9 48	10 8	27 0	
13	Tuesday..	8 47	9 11	19 7		9 35	9 57	28 7		10 28	10 50	26 3	
14	Wednesday	9 32	9 54	18 10		10 16	10 35	27 8		11 9	11 28	25 1	
15	Thursday..	10 17	10 41	18 1		10 55	11 18	26 9		11 48	..	23 11	
16	Friday ..	11 6	11 31	17 2		11 44	..	25 6		0 11	0 37	22 5	
17	Saturday..	11 58	..	16 4		0 13	0 44	24 6		1 6	1 37	21 2	
18	Sunday ..	0 31	1 4	16 1		1 19	1 52	24 3		2 12	2 45	20 10	
19	Monday..	1 41	2 19	16 10		2 26	3 22	25 2		3 19	3 55	21 11	
20	Tuesday..	2 54	3 29	18 1		3 37	4 14	26 9		4 30	5 7	23 11	
21	Wednesday	4 0	4 33	19 4		4 49	5 23	28 4		5 42	6 16	25 11	
22	Thursday..	5 3	5 31	20 3		5 54	6 22	29 6		6 47	7 15	27 5	
23	Friday ..	6 0	6 25	20 6		6 52	7 18	29 9		7 45	8 11	27 9	
24	Saturday..	6 46	7 10	20 8		7 40	8 3	30 0		8 33	8 56	28 1	
25	Sunday ..	7 31	7 51	20 6		8 24	8 44	29 9		9 17	9 37	27 9	
26	Monday..	8 11	8 30	20 0		9 3	9 20	29 1		9 56	10 13	26 11	
27	Tuesday..	8 50	9 10	19 0		9 38	9 56	28 0		10 31	10 49	25 5	
28	Wednesday	9 28	9 45	18 1		10 12	10 28	26 9		11 5	11 21	23 11	
29	Thursday..	10 5	10 24	16 10		10 45	11 2	25 2		11 38	11 55	21 11	
30	Friday ..	10 43	11 15	8		11 20	11 38	23 9		..	0 13	20 3	

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 1st, 8h. 22m. a.m. | Last Quarter.. 16th, 11h. 53m. a.m.
 Full Moon .. 9th, 9h. 41m. a.m. | New Moon .. 23rd, 7h. 57m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday..	10	52	11	18	15	10	11	27	11	53	16	4
2	Friday ..	11	45	..	..	15	3	..	0	20	15	9	..
3	Saturday..	0	15	0	46	15	2	0	50	1	21	15	8
4	Sunday ..	1	21	1	55	15	10	1	56	2	30	16	4
5	Monday..	2	27	2	56	16	8	3	2	3	31	17	2
6	Tuesday..	3	24	3	47	17	9	3	59	4	22	18	3
7	Wednesday	4	10	4	35	18	9	4	45	5	10	19	3
8	Thursday..	4	58	5	20	19	6	5	33	5	55	20	0
9	Friday ..	5	42	6	2	19	10	6	17	6	37	20	4
10	Saturday..	6	19	6	40	20	4	6	54	7	15	20	10
11	Sunday ..	7	0	7	16	20	7	7	35	7	51	21	1
12	Monday..	7	36	8	0	20	6	8	13	8	35	21	0
13	Tuesday..	8	22	8	46	20	1	8	57	9	21	20	7
14	Wednesday	9	7	9	29	19	6	9	42	10	4	20	0
15	Thursday..	9	52	10	16	18	10	10	27	10	51	19	4
16	Friday ..	10	41	11	6	18	0	11	16	11	41	18	6
17	Saturday..	11	33	..	..	17	4	..	0	8	17	10	..
18	Sunday ..	0	6	0	39	17	1	0	41	1	14	17	7
19	Monday..	1	16	1	54	17	9	1	51	2	29	18	3
20	Tuesday..	2	29	3	4	18	10	3	4	3	39	19	4
21	Wednesday	3	35	4	8	19	11	4	10	4	43	20	5
22	Thursday..	4	38	5	6	20	9	5	13	5	41	21	3
23	Friday ..	5	35	6	0	20	11	6	10	6	35	21	5
24	Saturday..	6	21	6	45	21	1	6	56	7	20	21	7
25	Sunday ..	7	6	7	26	20	11	7	41	8	1	21	5
26	Monday..	7	46	8	5	20	6	8	21	8	40	21	0
27	Tuesday..	8	25	8	45	19	8	9	0	9	20	20	2
28	Wednesday	9	3	9	20	18	10	9	38	9	55	19	4
29	Thursday..	9	40	9	59	17	9	10	15	10	34	18	3
30	Friday ..	10	18	11	36	16	9	10	53	11	11	17	3

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 3.

PHASES OF THE MOON.

Quarter. 1st, 8h. 22m. a.m. | Last Quarter.. 16th, 11h. 53m. a.m.
 Moon .. 9th, 9h. 41m. a.m. | New Moon .. 23rd, 7h. 57m. a.m.

V. A.	Newport.					Swansea.					Liverpool.				London.			
	Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.	
	H.	M.	H.	M.	F. I.	H.	M.	H.	M.	F. I.	H.	M.	H.	M.	H.	M.	H.	M.
Th	..		0	6	20 11	11	17	11	43	15 8	4	17	4	46	7	9	7	34
Fri	0	34	1	4	19 11	..		0	10	15 0	5	18	5	51	8	2	8	34
Sat	1	37	2	7	19 9	0	40	1	11	14 11	6	27	6	59	9	8	9	40
Sun	2	37	3	11	20 11	1	46	2	20	15 8	7	33	8	1	10	10	10	41
Mo	3	43	4	14	22 3	2	52	3	21	16 7	8	29	8	54	11	12	11	41
Tu	4	45	5	10	23 11	3	49	4	12	17 10	9	18	9	37	..		0	7
Wd	5	33	6	0	25 8	4	35	5	0	19 0	9	56	10	18	0	32	0	52
Th	6	22	6	44	26 11	5	23	5	45	19 10	10	36	10	58	1	12	1	34
Fri	7	6	7	28	27 6	6	7	6	27	20 3	11	17	11	38	1	54	2	13
Sat	7	46	8	6	28 4	6	44	7	5	20 10	11	55	..		2	33	2	53
Sun	8	26	8	45	28 7	7	25	7	41	21 1	0	16	0	36	3	10	3	30
Mo	9	3	9	23	28 6	8	3	8	25	21 0	0	53	1	15	3	49	4	8
Tu	9	43	10	5	27 11	8	47	9	11	20 7	1	36	1	57	4	27	4	48
Wd	10	24	10	43	26 11	9	32	9	54	19 10	2	21	2	43	5	10	5	34
Th	11	3	11	26	25 10	10	17	10	41	19 1	3	6	3	32	5	57	6	22
Fri	11	52	..		24 4	11	6	11	31	18 2	3	59	4	30	6	48	7	16
Sat	0	21	0	52	23 2	11	58	..		17 4	5	3	5	37	7	47	8	19
Sun	1	27	2	0	22 11	0	31	1	4	17 1	6	17	6	53	8	54	9	30
Mo	2	34	3	10	23 11	1	41	2	19	17 10	7	27	8	0	10	3	10	36
Tu	3	45	4	22	25 10	2	54	3	29	19 1	8	30	9	1	11	11	11	43
Wd	4	57	5	31	27 8	4	0	4	33	20 4	9	28	9	54	..		0	14
Th	6	2	6	30	28 11	5	3	5	31	21 3	10	20	10	43	0	42	1	10
Fri	7	0	7	26	29 3	6	0	6	25	21 6	11	11	11	35	1	37	2	1
Sat	7	48	8	11	29 7	6	46	7	10	21 8	11	57	..		2	27	2	51
Sun	8	32	8	52	29 8	7	31	7	51	21 6	0	21	0	42	3	12	3	35
Mo	9	11	9	28	28 5	8	11	8	30	21 0	1	3	1	23	3	55	4	15
Tu	9	46	10	4	27 3	8	50	9	10	20 0	1	41	2	1	4	35	4	53
Wd	10	20	10	36	25 10	9	28	9	45	19 1	2	21	2	39	5	13	5	33
Th	10	52	11	10	23 11	10	5	10	24	17 10	2	57	3	18	5	53	6	12
Fri	11	28	11	46	22 5	10	43	11	1	16 8	3	39	4	1	6	34	6	56

The above are in Greenwich Time, if local Mean Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 1st, 1h. 40m. a.m. | New Moon .. 22nd, 6h. 29m.
 Full Moon .. 8th, 8h. 27m. p.m. | First Quarter 30th, 7h. 9m.
 Last Quarter . 15th, 4h. 26m. p.m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgwater.					Bristol.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H. M.	H. M.	F. I.			H. M.	H. M.	F. I.			H. M.	H. M.	F. I.		
1	Saturday..	10 44	11 9	22 5			0 6	0 27	9 1			..	0 7	22		
2	Sunday ..	11 37	..	21 11			0 56	1 26	8 5			0 36	1 6	11		
3	Monday..	0 7	0 42	21 10			1 59	2 32	8 4			1 39	2 12	11		
4	Tuesday..	1 18	1 54	22 4			3 5	3 39	8 11			2 45	3 19	22		
5	Wednesday	2 27	2 57	23 2			4 13	4 46	10 0			3 53	4 26	23		
6	Thursday.	3 25	3 50	24 4			5 17	5 44	11 5			4 57	5 24	24		
7	Friday ..	4 17	4 42	25 6			6 11	6 36	12 11			5 51	6 16	25		
8	Saturday..	5 6	5 31	26 5			7 1	7 25	14 1			6 41	7 5	26		
9	Sunday ..	5 53	6 13	26 10			7 49	8 10	14 7			7 29	7 50	26		
10	Monday..	6 35	6 55	27 6			8 31	8 51	15 5			8 11	8 31	27		
11	Tuesday..	7 17	7 37	27 8			9 11	9 32	15 7			8 51	9 12	27		
12	Wednesday	8 0	8 19	27 8			9 52	10 12	15 7			9 32	9 52	27		
13	Thursday.	8 45	9 6	27 8			10 32	10 52	15 0			10 12	10 32	27		
14	Friday ..	9 29	9 52	26 3			11 11	11 32	18 10			10 51	11 12	27		
15	Saturday..	10 15	10 38	25 2			11 55	..	12 6			11 35	12 0	25		
16	Sunday ..	11 1	11 30	24 0			0 20	0 47	11 0			..	0 27	22		
17	Monday..	..	0 5	23 3			1 18	1 56	10 1			0 58	1 36	21		
18	Tuesday..	0 43	1 23	23 4			2 33	3 10	10 2			2 13	2 50	22		
19	Wednesday	2 4	2 40	24 1			3 49	4 28	11 2			3 29	4 8	23		
20	Thursday.	3 17	3 49	25 2			5 7	5 42	12 6			4 47	5 22	25		
21	Friday ..	4 20	4 47	26 1			6 14	6 41	13 8			5 54	6 21	27		
22	Saturday..	5 13	5 37	26 9			7 8	7 32	14 6			6 48	7 12	28		
23	Sunday ..	5 58	6 18	26 11			7 55	8 14	14 8			7 35	7 54	28		
24	Monday..	6 38	6 55	27 1			8 34	8 51	14 11			8 14	8 31	28		
25	Tuesday..	7 12	7 30	26 10			9 8	9 25	14 7			8 48	9 5	28		
26	Wednesday	7 45	8 4	26 6			9 41	9 56	14 2			9 21	9 36	27		
27	Thursday.	8 21	8 38	25 11			10 12	10 27	13 5			9 52	10 7	26		
28	Friday ..	8 53	9 11	25 1			10 40	10 56	12 5			10 20	10 36	25		
29	Saturday..	9 29	9 47	24 2			11 11	11 28	11 3			10 51	11 8	23		
30	Sunday ..	10 4	10 23	23 1			11 44	..	9 11			11 24	11 43	21		
31	Monday..	10 46	11 11	22 2			0 3	0 29	8 9			..	0 9	19		

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, sub. 17m.—Bridgwater, sub. 12m.—Bristol, sub. 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 1st, 1h. 40m. a.m. | New Moon .. 22nd, 6h. 29m. p.m.
 Full Moon .. 8th, 8h. 27m. p.m. | First Quarter. 30th, 7h. 9m. p.m.
 Last Quarter. 15th, 4h. 26m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.					Cardiff.					Gloucester.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Saturday..	11	19	11	44	14	7	11	59	..	22	4	0	31	0	52	18	5	
2	Sunday ..	..	..	0	12	13	11	0	28	0	58	21	6	1	21	1	51	17	5
3	Monday..	0	42	1	17	13	10	1	31	2	42	21	5	2	24	2	57	17	3
4	Tuesday..	1	53	2	29	14	5	2	37	3	11	22	3	3	30	4	4	18	4
5	Wednesdy	3	2	3	32	15	6	3	45	4	18	23	6	4	38	5	11	19	11
6	Thursday..	4	0	4	25	16	11	4	49	5	16	25	3	5	42	6	9	22	1
7	Friday ..	4	52	5	17	18	5	5	43	6	8	27	2	6	36	7	0	24	5
8	Saturday..	5	41	6	6	19	7	6	33	6	57	28	7	7	26	7	50	26	3
9	Sunday ..	6	28	6	48	20	1	7	21	7	42	29	3	8	14	8	35	27	1
10	Monday..	7	10	7	30	20	11	8	3	8	23	30	4	8	56	9	16	28	5
11	Tuesday..	7	52	8	12	21	1	8	43	9	4	30	7	9	36	9	57	28	9
12	Wednesdy	8	35	8	54	21	1	9	24	9	44	30	7	10	17	10	37	28	9
13	Thursday..	9	20	9	41	20	6	10	4	10	24	29	9	10	57	11	17	27	9
14	Friday ..	10	4	10	27	19	4	10	43	11	4	28	4	11	36	11	57	25	11
15	Saturday..	10	50	11	13	18	0	11	27	11	52	26	7	..	0	20	23	9	
16	Sunday ..	11	36	..	..	16	6	..	0	19	24	10	0	45	1	12	21	6	
17	Monday..	0	5	0	40	15	7	0	50	1	28	23	8	1	43	2	21	20	1
18	Tuesday..	1	18	1	58	15	8	2	5	2	42	23	9	2	58	3	35	20	3
19	Wednesdy	2	39	3	15	16	8	3	21	4	0	24	11	4	14	4	53	21	7
20	Thursday..	3	52	4	24	18	0	4	41	5	14	26	7	5	34	6	7	23	9
21	Friday ..	4	55	5	22	19	2	5	46	6	13	28	1	6	39	7	6	25	7
22	Saturday..	5	48	6	12	20	0	6	40	7	4	29	1	7	33	7	57	26	11
23	Sunday ..	6	33	6	53	20	2	7	27	7	46	29	5	8	20	8	39	27	3
24	Monday..	7	13	7	30	20	5	8	6	8	23	29	8	8	59	9	16	27	7
25	Tuesday..	7	47	8	5	20	1	8	40	8	57	29	3	9	33	9	50	27	1
26	Wednesdy	8	23	8	39	19	8	9	13	9	28	28	9	10	6	10	21	26	5
27	Thursday..	8	56	9	13	18	11	9	44	9	59	27	10	10	37	10	52	25	3
28	Friday ..	9	28	9	46	17	11	10	12	10	28	26	6	11	5	11	21	23	7
29	Saturday..	10	4	10	22	16	9	10	43	11	0	25	0	11	36	11	53	21	9
30	Sunday ..	10	39	10	58	15	5	11	16	11	35	23	5	..	0	9	19	9	
31	Monday..	11	21	11	46	14	3	..	0	1	22	0	0	28	0	54	18	0	

The above are in Greenwich Mean Time, if local time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 1st, 1h. 40m. a.m. | New Moon .. 22nd, 6h. 29m. p.m.
 Full Moon .. 8th, 8h. 27m. p.m. | First Quarter 30th, 7h. 9m. p.m.
 Last Quarter . 15th, 4h. 26m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.					Llanelly.					Milford Haven.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H.	M.	H.	M.	P.	H.	M.	H.	M.	P.	H.	M.	H.	M.	P.
1	Saturday..	10	54	11	19	15	9	11	29	11	54	16	3	11	29	11
2	Sunday ..	11	47	..	..	15	2	..	0	22	15	8	..	0	22	15
3	Monday..	0	17	0	52	15	1	0	52	1	27	15	7	0	52	1
4	Tuesday..	1	28	2	4	15	8	2	3	2	39	16	2	2	3	2
5	Wednesday	2	37	3	7	16	7	3	12	3	42	17	1	3	12	3
6	Thursday..	3	35	4	0	17	10	4	10	4	35	18	4	4	10	4
7	Friday ..	4	27	4	52	19	1	5	2	5	27	19	7	5	2	5
8	Saturday..	5	16	5	41	20	1	5	51	6	16	20	7	5	51	6
9	Sunday ..	6	3	6	23	20	7	6	38	6	58	21	1	6	38	6
10	Monday..	6	45	7	5	21	4	7	20	7	40	21	10	7	20	7
11	Tuesday..	7	27	7	47	21	6	8	2	8	22	22	0	8	2	8
12	Wednesday	8	10	8	29	21	6	8	45	9	4	22	0	8	45	9
13	Thursday..	8	55	9	16	20	11	9	30	6	51	21	5	9	30	9
14	Friday ..	9	39	10	2	19	11	10	14	10	37	20	5	10	14	10
15	Saturday..	10	25	10	48	18	9	11	0	11	23	19	3	11	0	11
16	Sunday ..	11	11	11	40	17	6	11	46	..	18	0	11	46	..	17
17	Monday..	..	..	0	15	16	8	0	15	0	50	17	2	0	15	0
18	Tuesday..	0	53	1	33	16	9	1	28	2	8	17	3	1	28	2
19	Wednesday	2	14	2	50	17	7	2	49	3	25	18	1	2	49	3
20	Thursday..	3	27	3	59	18	9	4	2	4	34	19	3	4	2	4
21	Friday ..	4	30	4	57	19	9	5	5	5	32	20	3	5	5	5
22	Saturday..	5	23	5	47	20	6	5	58	6	22	21	0	5	58	6
23	Sunday ..	6	8	6	28	20	8	6	43	7	3	21	2	6	43	7
24	Monday..	6	48	7	5	20	10	7	23	7	40	21	4	7	23	7
25	Tuesday..	7	22	7	40	20	7	7	57	8	15	21	1	7	57	8
26	Wednesday	7	58	8	14	20	2	8	33	8	49	20	8	8	33	8
27	Thursday..	8	31	8	48	19	7	9	6	9	23	20	1	9	6	9
28	Friday ..	9	3	9	21	18	8	9	38	9	56	19	2	9	38	9
29	Saturday..	9	39	9	57	17	8	10	14	10	32	18	2	10	14	10
30	Sunday ..	10	14	10	33	16	6	10	49	11	8	17	0	10	49	11
31	Monday..	10	56	11	21	15	6	11	31	11	56	16	0	11	31	11

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 3.

PHASES OF THE MOON.

First Quarter. 1st, 1h. 40m. a.m. | New Moon .. 22nd, 6h. 29m. p.m.
 Full Moon .. 8th, 8h. 27m. p.m. | First Quarter. 30th, 7h. 9m. p.m.
 Last Quarter. 15th, 4h 26m. p.m.

M. W. D. D.		Newport.					Swansea.					Liverpool.				London.					
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.			
		H. M.	H. M.	F. I.	H. M.		H. M.	F. I.	H. M.	H. M.		F. I.	H. M.	H. M.	F. I.	H. M.	H. M.				
1	Sat	..	0	7	20	9	11	19	11	44	15	7	4	23	4	48	7	18	7	40	
2	Sun	0	36	1	6	19	9	..	0	12	14	11	5	20	5	54	8	4	8	36	
3	Mo	1	39	2	12	19	7	0	42	1	17	14	10	6	30	7	4	9	10	9	42
4	Tu	2	45	3	19	20	7	1	53	2	29	15	5	7	37	8	8	10	14	10	47
5	Wd	3	53	4	26	22	1	3	2	3	32	16	6	8	37	9	3	11	20	11	50
6	Th	4	57	5	24	24	0	4	0	4	25	17	11	9	28	9	49	..	0	17	
7	Fri	5	51	6	16	26	3	4	52	5	17	19	5	10	10	10	31	0	42	1	4
8	Sat	6	41	7	5	27	11	5	41	6	6	20	7	10	53	11	16	1	27	1	49
9	Sun	7	29	7	50	28	7	6	28	6	48	21	1	11	40	11	59	2	10	2	32
10	Mo	8	11	8	31	29	11	7	10	7	30	21	11	..	0	22	2	54	3	14	
11	Tu	8	51	9	12	30	2	7	52	8	12	22	1	0	42	1	4	3	35	3	54
12	Wd	9	32	9	52	30	2	8	35	8	54	22	1	1	24	1	45	4	14	4	36
13	Th	10	12	10	32	29	3	9	20	9	41	21	6	2	4	2	30	4	58	5	19
14	Fri	10	51	11	12	27	8	10	4	10	27	20	4	2	52	3	17	5	43	6	7
15	Sat	11	35	12	0	25	8	10	50	11	13	19	0	3	42	4	10	6	33	6	59
16	Sun	..	0	27	23	6	11	36	..	17	6	4	39	5	10	7	27	7	56		
17	Mo	0	58	1	36	22	3	0	5	0	40	16	7	5	45	6	27	8	26	9	2
18	Tu	2	13	2	50	22	5	1	18	1	58	16	8	7	5	7	42	9	39	10	15
19	Wd	3	29	4	8	23	8	2	39	3	15	17	8	8	17	8	49	10	52	11	29
20	Th	4	47	5	22	25	8	3	52	4	24	19	0	9	21	9	47	..	0	2	
21	Fri	5	54	6	21	27	4	4	55	5	22	20	2	10	13	10	35	0	35	1	2
22	Sat	6	48	7	12	28	5	5	48	6	12	21	0	10	59	11	22	1	30	1	53
23	Sun	7	35	7	54	28	9	6	33	6	53	21	2	11	43	..		2	16	2	38
24	Mo	8	14	8	31	29	1	7	13	7	30	21	5	0	4	0	24	2	59	3	18
25	Tu	8	48	9	5	28	7	7	47	8	5	21	1	0	41	0	59	3	37	3	54
26	Wd	9	21	9	36	28	1	8	23	8	39	20	8	1	17	1	34	4	11	4	29
27	Th	9	52	10	7	27	1	8	56	9	13	19	11	1	50	2	6	4	46	5	2
28	Fri	10	20	10	36	25	6	9	28	9	46	18	11	2	23	2	39	5	19	5	36
29	Sat	10	51	11	8	23	9	10	4	10	22	17	9	2	58	3	17	5	53	6	13
30	Sun	11	24	11	43	22	0	10	39	10	58	16	5	3	37	3	57	6	33	6	54
31	Mo	..	0	9	20	3	11	21	11	46	15	3	4	20	4	50	7	14	7	37	

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 7th, 5h. 29m. a.m. | New Moon .. 21st, 7h. 17m. a.m.
 Last Quarter. 13th, 9h. 42m. p.m. | First Quarter. 29th, 11h. 46m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Tuesday..	..		0	16	13	4	0	30	1	22	10	
2	Wednesdy	0	51	1	32	13	5	1	40	2	18	21	0
3	Thursday	2	13	2	53	14	8	2	56	3	36	22	6
4	Friday ..	3	30	4	2	16	5	4	16	4	50	24	8
5	Saturday..	4	30	4	55	18	5	5	20	5	46	27	2
6	Sunday ..	5	20	5	45	20	2	6	10	6	36	29	5
7	Monday..	6	8	6	29	20	11	6	59	7	22	30	4
8	Tuesday..	6	51	7	14	22	1	7	44	8	7	31	8
9	Wednesdy	7	35	7	55	22	7	8	28	8	48	32	4
10	Thursday	8	15	8	37	22	4	9	7	9	26	32	0
11	Friday ..	8	59	9	21	21	8	9	46	10	6	31	3
12	Saturday..	9	43	10	4	20	3	10	25	10	43	29	6
13	Sunday ..	10	27	10	49	18	5	11	4	11	26	27	2
14	Monday..	11	15	11	42	16	4	11	54	..		24	6
15	Tuesday..	..		0	15	14	10	0	25	1	1	22	9
16	Wednesdy	0	57	1	43	14	7	1	45	2	28	22	4
17	Thursday	2	28	3	9	15	7	3	10	3	52	23	8
18	Friday ..	3	41	4	12	17	2	4	28	5	2	25	6
19	Saturday	4	42	5	8	18	6	5	32	5	59	27	3
20	Sunday ..	5	32	5	55	19	7	6	23	6	46	28	7
21	Monday..	6	15	6	31	20	0	7	7	7	24	29	1
22	Tuesday..	6	48	7	5	20	5	7	42	7	58	29	8
23	Wednesdy	7	22	7	38	20	6	8	15	8	31	29	9
24	Thursday	7	54	8	9	20	3	8	47	9	1	29	6
25	Friday ..	8	26	8	43	19	7	9	16	9	32	28	7
26	Saturday..	8	58	9	14	18	7	9	45	9	59	27	5
27	Sunday ..	9	28	9	45	17	4	10	12	10	28	25	10
28	Monday..	10	4	10	23	16	4	10	43	11	1	24	2
29	Tuesday..	10	44	11	7	14	8	11	20	11	45	22	6
30	Wednesdy	11	35	..		13	5	..		0	17	21	0
31	Thursday	0	7	0	46	13	1	0	53	1	35	20	7

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 7th, 5h. 29m. a.m. | New Moon .. 21st, 7h. 17m. a.m.
 Last Quarter. 13th, 9h. 42m. p.m. | First Quarter. 29th, 11h. 46m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.	
1	Tuesday..	11 51	..	14 8		..	0 26	15 2		..	0 26	15 0	
2	Wednesday	0 26	1 7	14 9		1 1	1 42	15 3		1 1	1 42	15 1	
3	Thursday..	1 48	2 28	15 10		2 23	3 3	16 4		2 23	3 3	16 0	
4	Friday ..	3 5	3 37	17 5		3 40	4 12	17 11		3 40	4 12	17 5	
5	Saturday..	4 5	4 30	19 1		4 40	5 5	19 7		4 40	5 5	19 0	
6	Sunday ..	4 55	5 20	20 8		5 30	5 55	21 2		5 30	5 55	20 5	
7	Monday..	5 43	6 4	21 4		6 18	6 39	21 10		6 18	6 39	21 0	
8	Tuesday..	6 26	6 49	22 4		7 1	7 24	22 10		7 1	7 24	21 11	
9	Wednesday	7 10	7 30	22 9		7 45	8 5	23 3		7 45	8 5	22 4	
10	Thursday..	7 50	8 12	22 7		8 25	8 47	23 1		8 25	8 47	22 2	
11	Friday ..	8 34	8 56	21 11		9 9	9 31	22 5		9 9	9 31	21 7	
12	Saturday..	9 18	9 39	20 9		9 53	10 14	21 3		9 53	10 14	20 6	
13	Sunday ..	10 2	10 24	19 1		10 37	10 59	19 7		10 37	10 59	19 0	
14	Monday..	10 50	11 17	17 4		11 25	11 52	17 10		11 25	11 52	17 4	
15	Tuesday..	11 50	..	16 0		..	0 25	16 6		..	0 25	16 2	
16	Wednesday	0 31	1 18	15 9		1 7	1 53	16 3		1 7	1 53	15 11	
17	Thursday..	2 3	2 44	16 8		2 38	3 19	17 2		2 38	3 19	16 9	
18	Friday ..	3 16	3 47	18 0		3 51	4 22	18 6		3 51	4 22	18 0	
19	Saturday..	4 17	4 43	19 2		4 52	5 18	19 8		4 52	5 18	19 1	
20	Sunday ..	5 7	5 30	20 1		5 42	6 5	20 7		5 42	6 5	19 11	
21	Monday..	5 50	6 6	20 6		6 25	6 41	21 0		6 25	6 41	20 3	
22	Tuesday..	6 23	6 40	20 10		6 58	7 15	21 4		6 58	7 15	20 7	
23	Wednesday	6 57	7 13	20 11		7 32	7 48	21 5		7 32	7 48	20 8	
24	Thursday..	7 29	7 44	20 9		8 4	8 19	21 3		8 4	8 19	20 6	
25	Friday ..	8 1	8 18	20 1		8 36	8 53	20 7		8 36	8 53	19 11	
26	Saturday..	8 33	8 49	19 3		9 8	9 24	19 9		9 8	9 24	19 2	
27	Sunday ..	9 3	9 20	18 2		9 38	9 55	18 8		9 38	9 55	18 2	
28	Monday..	9 39	9 58	17 0		10 14	10 33	17 6		10 14	10 33	17 1	
29	Tuesday..	10 19	10 42	15 10		10 54	11 17	16 4		10 54	11 17	16 0	
30	Wednesday	11 10	11 42	14 9		11 45	..	15 3		11 45	..	15 1	
31	Thursday..	..	0 22	14 6		0 17	0 56	15 0		0 17	0 56	14 10	

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 7th, 5h. 29m. a.m. | New Moon .. 21st, 7h. 17m. a.m.
 First Quarter .. 13th, 9h. 42m. p.m. | First Quarter. 29th, 11h. 46m. a.m.

W. D.	Newport.					Swansea.					Liverpool.		London.							
	Morn.		Even.		Height	Morn.		Even.		Height	Morn.	Even.	Morn.	Even.						
	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.				
Tu	0	38	1	10	19	0	..	0	16	14	4	5	22	5	58	8	6	8	38	
We	1	48	2	26	19	2	0	51	1	32	14	5	6	41	7	19	9	14	9	51
Th	3	4	3	44	20	11	2	13	2	53	15	8	7	54	8	29	10	28	11	5
Fri	4	24	4	59	23	4	3	30	4	2	17	5	9	2	9	29	11	42	..	..
Sat	5	28	5	54	26	3	4	30	4	55	19	5	9	52	10	13	0	15	0	43
Sun	6	18	6	44	28	9	5	20	5	45	21	2	10	33	10	56	1	7	1	30
Mo	7	7	7	30	29	11	6	8	6	29	21	11	11	18	11	40	1	51	2	13
Tu	7	52	8	15	31	5	6	51	7	14	23	1	..	0	2	2	34	2	55	..
We	8	36	8	56	32	2	7	35	7	55	23	7	0	25	0	46	3	16	3	38
Th	9	15	9	34	31	10	8	15	8	37	23	4	1	7	1	27	3	59	4	19
Fri	9	54	10	14	30	11	8	59	9	21	22	8	1	48	2	9	4	39	5	0
Sat	10	33	10	51	28	11	9	43	10	4	21	3	2	32	2	54	5	22	5	45
Sun	11	12	11	34	26	3	10	27	10	49	19	5	3	17	3	42	6	9	6	33
Mo	..	0	2	23	2	2	11	15	11	42	17	4	4	9	4	42	6	59	7	26
Tu	0	33	1	9	21	2	..	0	15	15	10	5	5	17	5	57	7	58	8	33
We	1	53	2	36	20	9	0	57	1	43	15	7	6	46	7	29	9	13	9	56
Th	3	18	4	0	22	3	2	28	3	9	16	7	8	7	8	43	10	38	11	19
Fri	4	36	5	10	24	4	3	41	4	12	18	2	9	11	9	37	11	56	..	..
Sat	5	40	6	7	26	5	4	42	5	8	19	6	10	2	10	24	0	25	0	52
Sun	6	31	6	54	27	11	5	32	5	56	20	7	10	44	11	6	1	18	1	41
Mo	7	15	7	32	28	5	6	15	6	31	21	0	11	25	11	42	2	2	2	22
Tu	7	50	8	6	29	1	6	48	7	5	21	5	11	59	..	..	2	41	2	57
We	8	23	8	39	29	3	7	22	7	38	21	6	0	16	0	33	3	14	3	30
Th	8	55	9	9	28	11	7	54	8	9	21	3	0	50	1	6	3	46	4	2
Fri	9	24	9	40	27	11	8	26	8	43	20	7	1	21	1	37	4	18	4	33
Sat	9	53	10	7	26	7	8	58	9	14	19	7	1	53	2	8	4	49	5	6
Sun	10	20	10	36	24	9	9	28	9	45	18	4	2	24	2	39	5	21	5	37
Mo	10	51	11	9	22	10	10	4	10	23	17	0	2	57	3	17	5	53	6	12
Tu	11	28	11	53	20	11	10	44	11	7	15	8	3	38	4	2	6	33	6	55
We	..	0	25	19	2	2	11	35	..	14	5	4	4	31	5	8	7	19	7	48
Th	1	1	1	43	18	8	0	7	0	46	14	1	5	49	6	35	8	24	9	5

The above are in Greenwich Time, if local Mean Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 5th, 1h. 52m. p.m. | New Moon .. 19th, 10h. 46m. p.m.
 Last Quarter.. 12th, 4h. 57m. a.m. | First Quarter. 28th, 2h. 47m. a.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgwater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	0	55	1	38	22	1	2	44	3	24	8	8
2	Saturday..	2	16	2	49	23	9	4	2	4	38	10	9
3	Sunday ..	3	21	3	51	25	8	5	12	5	45	13	1
4	Monday..	4	18	4	43	27	4	6	12	6	37	15	2
5	Tuesday..	5	7	5	32	28	8	7	2	7	26	16	10
6	Wednesday	5	52	6	15	29	2	7	48	8	11	17	6
7	Thursday	6	38	6	58	29	8	8	34	8	54	18	1
8	Friday ..	7	20	7	40	29	5	9	16	9	35	17	10
9	Saturday..	8	4	8	26	28	6	9	56	10	16	16	8
10	Sunday ..	8	49	9	10	27	1	10	36	10	55	14	11
11	Monday..	9	33	9	56	25	4	11	14	11	36	12	8
12	Tuesday..	10	24	10	52	23	6	..	0	4	10	5	11
13	Wednesday	11	24	..	22	2	0	0	36	1	12	8	9
14	Thursday.	0	3	0	50	21	10	1	54	2	39	8	4
15	Friday ..	1	35	2	16	22	8	3	22	4	2	9	4
16	Saturday..	2	47	3	17	24	0	4	35	5	9	11	0
17	Sunday ..	3	45	4	10	25	3	5	38	6	4	12	7
18	Monday..	4	32	4	52	26	2	6	26	6	47	13	9
19	Tuesday..	5	12	5	30	26	10	7	7	7	24	14	7
20	Wednesday	5	45	6	0	27	0	7	40	7	57	14	9
21	Thursday.	6	17	6	33	27	2	8	13	8	29	15	0
22	Friday ..	6	48	7	4	27	0	8	44	9	0	14	9
23	Saturday..	7	20	7	35	26	6	9	16	9	30	14	2
24	Sunday ..	7	51	8	7	25	10	9	44	10	0	13	4
25	Monday..	8	24	8	42	25	0	10	14	10	30	12	3
26	Tuesday..	9	0	9	19	24	0	10	45	11	3	11	0
27	Wednesday	9	40	10	4	22	10	11	21	11	44	9	7
28	Thursday.	10	30	11	1	21	11	..	0	11	8	5	11
29	Friday ..	11	36	..	21	7	0	0	47	1	25	7	11
30	Saturday..	0	17	1	2	22	0	2	9	2	50	8	6

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 5th, 1h. 52m. p.m.	New Moon .. 19th, 10h. 46m. p.m.
Last Quarter.. 12th, 4h. 57m. a.m.	First Quarter. 28th, 2h. 47m. a.m.

N. D.	WEEK DAYS.	Briton-Ferry.						Cardiff.						Gloucester.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	1	30	2	13	14	2	2	16	2	54	21	10	3	9	3	47	17	9
2	Saturday..	2	51	3	24	16	3	3	34	4	10	24	5	4	27	5	3	21	0
3	Sunday ..	3	56	4	26	18	7	4	44	5	17	27	5	5	37	6	10	24	9
4	Monday..	4	53	5	18	20	8	5	44	6	9	30	0	6	37	7	2	28	1
5	Tuesday..	5	42	6	7	22	4	6	34	6	58	32	0	7	27	7	51	30	7
6	Wednesday	6	27	6	50	23	0	7	20	7	43	32	11	8	13	8	36	31	7
7	Thursday	7	13	7	33	23	7	8	6	8	26	33	7	8	59	9	19	32	6
8	Friday ..	7	55	8	15	23	4	8	43	9	7	33	3	9	41	10	0	32	1
9	Saturday..	8	39	9	1	22	2	9	28	9	48	31	9	10	21	10	41	30	3
10	Sunday ..	9	24	9	45	20	5	10	8	10	27	29	8	11	1	11	20	27	7
11	Monday..	10	8	10	31	18	2	10	46	11	8	26	11	11	39	..	24	1	1
12	Tuesday..	10	59	11	27	15	11	11	36	..	24	0	0	1	0	30	20	6	6
13	Wednesday	11	59	..	14	3	0	0	8	0	44	22	0	1	..	1	37	18	0
14	Thursday.	0	38	1	25	13	10	1	26	1	11	21	5	2	19	3	4	17	3
15	Friday ..	2	10	2	51	14	10	2	54	3	34	22	9	3	47	4	27	18	11
16	Saturday..	3	22	3	52	16	6	4	7	4	41	24	10	5	0	5	34	21	6
17	Sunday ..	4	20	4	45	18	1	5	10	5	36	26	9	6	3	6	29	23	11
18	Monday..	5	7	5	27	19	3	5	58	6	19	28	3	6	51	7	12	25	9
19	Tuesday..	5	47	6	5	20	1	6	39	6	56	29	3	7	32	7	49	27	1
20	Wednesday	6	20	6	35	20	3	7	12	7	29	29	6	8	5	8	22	27	5
21	Thursday.	6	52	7	8	20	6	7	45	8	1	29	9	8	38	8	54	27	9
22	Friday ..	7	23	7	39	20	3	8	16	8	32	29	6	9	9	9	25	27	5
23	Saturday..	7	55	8	10	19	8	8	48	9	2	28	9	9	41	9	55	26	5
24	Sunday ..	8	26	8	42	18	10	9	16	9	31	27	8	10	9	10	24	25	1
25	Monday..	8	59	9	17	17	9	9	46	10	2	26	5	10	39	10	55	23	6
26	Tuesday..	9	34	9	54	16	6	10	17	10	35	24	10	11	10	11	28	21	6
27	Wednesday	10	15	10	39	15	1	10	53	11	16	23	0	11	45	..	19	3	3
28	Thursday.	11	5	11	36	13	11	11	43	..	21	6	0	0	9	0	36	17	5
29	Friday ..	..	0	11	13	5	0	0	19	0	57	21	0	1	12	1	51	16	9
30	Saturday..	0	52	1	37	14	0	1	41	2	22	21	8	2	34	3	15	17	7

The above are in Greenwich Mean Time, if local Time be required for Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 4th, 10h. 31m. p.m. | New Moon .. 19th, 4h. 27m. p.m.
 Last Quarter . 11th, 3h. 22m. p.m. | First Quarter 27th, 3h. 50m. p.m.

M. D.	WEEK DAYS	Barnstaple.				Bridgwater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	P.	I.	H.	M.	H.	M.	P.	I.
1	Sunday ..	1	43	2	21	23	7	3	29	4	8	10	6
2	Monday ..	2	51	3	18	25	10	4	40	5	10	13	4
3	Tuesday ..	3	45	4	10	27	7	5	38	6	6	15	6
4	Wednesday ..	4	37	5	3	28	10	6	31	6	57	17	1
5	Thursday ..	5	26	5	49	29	5	7	21	7	45	17	10
6	Friday ..	6	11	6	35	29	9	8	8	8	31	18	3
7	Saturday ..	7	0	7	21	29	5	8	55	9	16	17	10
8	Sunday ..	7	45	8	7	28	5	9	38	9	59	16	7
9	Monday ..	8	31	8	53	26	11	10	20	10	40	14	8
10	Tuesday ..	9	17	9	40	25	3	11	1	11	22	12	7
11	Wednesday ..	10	5	10	34	23	5	11	45	..	10	4	11
12	Thursday ..	11	6	11	40	22	1	0	16	0	52	8	8
13	Friday ..	..	..	0	19	21	9	1	29	2	11	8	2
14	Saturday ..	1	4	1	44	22	4	2	52	3	30	8	11
15	Sunday ..	2	18	2	49	23	6	4	4	4	38	10	5
16	Monday ..	3	14	3	37	24	8	5	5	5	30	11	10
17	Tuesday ..	4	1	4	21	25	8	5	55	6	15	13	1
18	Wednesday ..	4	41	4	57	26	4	6	35	6	51	13	11
19	Thursday ..	5	17	5	34	26	6	7	11	7	28	14	2
20	Friday ..	5	49	6	5	26	9	7	45	8	2	16	6
21	Saturday ..	6	23	6	39	26	10	8	19	8	35	14	7
22	Sunday ..	6	54	7	9	26	6	8	50	9	5	14	2
23	Monday ..	7	24	7	40	26	0	9	19	9	35	13	6
24	Tuesday ..	8	0	8	17	25	3	9	52	10	8	12	7
25	Wednesday ..	8	37	8	56	24	4	10	26	10	43	11	5
26	Thursday ..	9	18	9	41	23	6	11	2	11	22	10	5
27	Friday ..	10	8	10	37	22	8	11	48	..	9	4	11
28	Saturday ..	11	8	11	43	22	3	0	19	0	54	8	10
29	Sunday ..	..	..	0	24	22	9	1	33	2	15	9	6
30	Monday ..	2	5	1	44	24	0	2	53	3	30	11	0
31	Tuesday ..	2	16	2	46	25	8	4	2	4	34	13	1

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 4th, 10h. 31m. p.m. | New Moon .. 19th, 4h. 27m. p.m.
 Last Quarter. 11th, 3h. 22m. p.m. | First Quarter. 27th, 3h. 50m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.					Cardiff.					Gloucester.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H. M.	H. M.	P. I.	P. I.		H. M.	H. M.	P. I.	P. I.		H. M.	H. M.	P. I.	P. I.	
1	Sunday ..	2 18	2 56	16	0		3 54	4 33	24	2		3 1	3 40	20	8	
2	Monday ..	3 26	3 53	18	10		5 5	5 35	27	8		4 12	4 42	25	1	
3	Tuesday ..	4 20	4 45	21	0		6 3	6 31	30	6		5 10	5 38	28	7	
4	Wednesday	5 12	5 38	22	7		6 56	7 22	32	4		6 3	6 29	30	11	
5	Thursday ..	6 1	6 24	23	4		7 46	8 10	33	3		6 53	7 17	32	1	
6	Friday ..	6 46	7 10	23	9		8 33	8 56	33	9		7 40	8 3	32	8	
7	Saturday ..	7 34	7 56	23	4		9 20	9 41	33	3		8 27	8 48	32	1	
8	Sunday ..	8 20	8 42	22	1		10 3	10 24	31	8		9 10	9 31	30	1	
9	Monday ..	9 6	9 28	20	2		10 45	11 5	29	5		9 52	10 12	27	3	
10	Tuesday ..	9 52	10 15	18	1		11 26	11 47	26	9		10 33	10 54	23	11	
11	Wednesday	10 40	11 9	15	10		..	0 10	23	11		11 17	11 48	20	5	
12	Thursday ..	11 41	..	14	2		0 41	1 17	21	10		..	0 24	17	9	
13	Friday ..	0 15	0 54	13	8		1 54	2 36	21	3		1 1	1 43	17	1	
14	Saturday ..	1 39	2 19	14	5		3 17	3 55	22	3		2 24	3 2	18	4	
15	Sunday ..	2 53	3 24	15	11		4 29	5 3	24	0		3 36	4 10	20	6	
16	Monday ..	3 49	4 12	17	4		5 30	5 55	25	10		4 37	5 2	22	9	
17	Tuesday ..	4 36	4 56	18	7		6 20	6 40	27	5		5 27	5 47	24	9	
18	Wednesday	5 16	5 32	19	5		7 0	7 16	28	6		6 7	6 23	26	1	
19	Thursday ..	5 52	6 9	19	8		7 36	7 53	28	9		6 43	7 0	26	5	
20	Friday ..	6 24	6 40	20	0		8 10	8 27	29	1		7 17	7 34	26	11	
21	Saturday	6 58	7 14	20	1		8 44	9 0	29	3		7 51	8 7	27	1	
22	Sunday ..	7 29	7 41	19	8		9 15	9 30	28	9		8 22	8 37	26	5	
23	Monday ..	8 0	8 15	19	0		9 44	10 0	28	0		8 51	9 7	25	5	
24	Tuesday ..	8 34	8 52	18	1		10 17	10 34	26	9		9 24	9 40	23	11	
25	Wednesday	9 12	9 31	16	11		10 51	11 8	25	3		9 58	10 15	22	1	
26	Thursday ..	9 53	10 16	15	11		11 27	11 47	24	0		10 34	10 54	20	6	
27	Friday ..	10 43	11 12	14	10		..	0 13	22	9		11 20	11 51	18	11	
28	Saturday ..	11 43	..	14	4		0 44	1 19	22	1		..	0 26	18	2	
29	Sunday ..	0 18	1 0	15	0		1 58	2 40	22	10		1 5	1 47	19	1	
30	Monday ..	1 40	2 19	16	6		3 18	3 55	24	10		2 25	3 2	21	6	
31	Tuesday ..	2 51	3 21	18	7		4 27	5 0	27	5		3 34	4 6	24	9	

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 4th, 10h. 31m. p.m. | New Moon .. 19th, 4h. 27m. p.m.
 Last Quarter . 11th, 3h. 22m. p.m. | First Quarter. 27th, 3h. 50m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.					Llanelly.					Milford Haven.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H.	M.	H.	M.	F.	H.	M.	H.	M.	F.	H.	M.	H.	M.	F.
1	Sunday ..	1	53	2	31	17 0	2	28	3	6	17 6	2	28	3	6	17 1
2	Monday..	3	1	3	28	19 6	3	36	4	3	20 0	3	36	4	3	19 4
3	Tuesday..	3	55	4	20	21 5	4	30	4	55	21 11	4	30	4	55	21 1
4	Wednesdy	4	47	5	13	22 9	5	22	5	48	23 3	5	22	5	48	22 4
5	Thursday..	5	36	5	59	23 5	6	11	6	34	23 11	6	11	6	34	22 11
6	Friday ..	6	21	6	45	23 9	6	56	7	20	24 3	6	56	7	20	23 3
7	Saturday..	7	9	7	31	23 5	7	44	8	6	23 11	7	44	8	6	22 11
8	Sunday ..	7	55	8	17	22 4	8	30	8	52	22 10	8	30	8	52	21 11
9	Monday..	8	41	9	3	20 8	9	16	9	38	21 2	9	16	9	38	20 5
10	Tuesday..	9	27	9	50	18 10	10	2	10	25	19 4	10	2	10	25	18 9
11	Wednesdy	10	15	10	44	16 10	10	50	11	19	17 4	10	50	11	19	16 11
12	Thursday..	11	16	11	50	15 5	11	51	..	15	11	11	51	..	15	7
13	Friday ..	..	0	29	15 0	0 25	1	4	15	6	0 25	1	4	15	3	0 25
14	Saturday..	1	14	1	54	15 8	1	49	2	29	16 2	1	49	2	29	15 10
15	Sunday ..	2	28	2	59	16 11	3	3	3	34	15 7	3	3	3	34	17 0
16	Monday..	3	24	3	47	18 2	3	59	4	22	18 8	3	59	4	22	18 2
17	Tuesday..	4	11	4	31	19 3	4	46	5	6	19 9	4	46	5	6	19 2
18	Wednesdy	4	51	5	7	20 0	5	26	5	42	20 6	5	26	5	42	19 10
19	Thursday..	5	27	5	44	20 2	6	2	6	19	20 8	6	2	6	19	20 0
20	Friday ..	5	59	6	15	20 6	6	34	6	50	21 0	6	34	6	50	20 3
21	Saturday..	6	33	6	49	20 7	7	8	7	24	21 1	7	8	7	24	20 4
22	Sunday ..	7	4	7	19	20 2	7	39	7	54	20 8	7	39	7	54	20 0
23	Monday..	7	34	7	50	19 8	8	9	8	25	20 2	8	9	8	25	19 6
24	Tuesday..	8	9	8	27	18 10	8	44	9	2	19 4	8	44	9	2	18 9
25	Wednesdy	8	47	9	6	17 10	9	22	9	41	18 4	9	22	9	41	17 10
26	Thursday..	9	28	9	51	16 11	10	3	10	26	17 5	10	3	10	26	17 0
27	Friday ..	10	18	10	47	16 0	10	53	11	22	16 6	10	53	11	22	16 2
28	Saturday..	11	18	11	53	15 7	11	53	..	16	1	11	53	..	15	9
29	Sunday ..	..	0	34	16 1	0 28	1	9	16	7	0 28	1	9	16	3	0 28
30	Monday..	2	15	1	54	17 6	1	50	2	29	18 0	1	50	2	29	17 6
31	Tuesday..	2	26	2	56	19 3	3	1	3	31	19 9	3	1	3	31	19 2

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 4th, 10h. 31m. p.m. | New Moon .. 19th, 4h. 27m. p.m.
 Last Quarter. 11th, 3h. 22m. p.m. | First Quarter. 27th, 3h. 50m. p.m.

M. D.	W. D.	Newport.						Swansea.						Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Morn.		Even.	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.	H.	M.
1	Sun	3	9	3	48	22	10	2	18	2	56	17	0	7	59	8	32	10	32	11	10
2	Mo	4	20	4	50	26	11	3	26	3	53	19	10	8	59	9	22	11	45	..	..
3	Tu	5	18	5	46	30	1	4	20	4	45	22	0	9	44	10	6	0	12	0	36
4	Wd	6	11	6	37	32	2	5	12	5	38	23	7	10	27	10	50	0	59	1	23
5	Th	7	1	7	25	33	4	6	1	6	24	24	4	11	12	11	34	1	45	2	7
6	Fri	7	48	8	11	33	10	6	46	7	10	24	9	11	57	..	..	2	28	2	50
7	Sat	8	35	8	56	33	4	7	34	7	56	24	4	0	21	0	45	3	12	3	35
8	Sun	9	18	9	39	31	5	8	20	8	42	23	1	1	8	1	31	3	58	4	20
9	Mo	10	0	10	20	28	9	9	6	9	28	21	2	1	52	2	16	4	43	5	5
10	Tu	10	41	11	2	25	10	9	52	10	15	19	1	2	39	3	4	5	29	5	53
11	Wd	11	25	11	56	22	7	10	40	11	9	16	10	3	30	3	59	6	19	6	46
12	Th	..	..	0	32	20	1	11	41	..	..	15	2	4	34	5	16	7	15	7	51
13	Fri	1	9	1	51	19	5	0	15	0	54	14	8	5	57	6	44	8	32	9	13
14	Sat	2	32	3	10	20	7	1	39	2	19	15	5	7	25	8	0	9	54	10	34
15	Sun	3	44	4	18	22	8	2	53	3	24	16	11	8	29	8	57	11	11	11	42
16	Mo	4	45	5	10	24	9	3	49	4	12	18	4	9	18	9	37	..	..	0	10
17	Tu	5	35	5	55	26	7	4	36	4	56	19	7	9	57	10	14	0	32	0	52
18	Wd	6	15	6	31	27	10	5	16	5	32	20	5	10	30	10	44	1	13	1	31
19	Th	6	51	7	8	28	1	5	52	6	9	20	8	11	3	11	19	1	48	2	2
20	Fri	7	25	7	42	28	5	6	24	6	40	21	0	11	34	11	51	2	19	2	35
21	Sat	7	59	8	15	28	7	6	58	7	14	21	1	..	0	9	..	2	50	3	6
22	Sun	8	30	8	45	28	1	7	29	7	44	20	8	0	24	0	40	3	23	3	38
23	Mo	8	59	9	15	27	3	8	0	8	15	20	0	0	56	1	11	3	53	4	8
24	Tu	9	32	9	48	25	10	8	34	8	52	19	1	1	27	1	45	4	23	4	39
25	Wd	10	6	10	23	24	0	9	12	9	31	17	11	2	2	2	23	4	57	5	15
26	Th	10	42	11	2	22	8	9	53	10	16	16	11	2	42	3	5	5	35	5	56
27	Fri	11	28	11	59	21	2	10	43	11	12	15	10	3	31	4	1	6	21	6	47
28	Sat	..	..	0	34	20	5	11	43	..	..	15	4	4	37	5	18	7	18	7	54
29	Sun	1	13	1	55	21	4	0	18	1	0	16	0	6	0	6	48	8	34	9	17
30	Mo	2	33	3	10	23	6	1	40	2	19	17	6	7	26	8	0	9	58	10	35
31	Tu	3	42	4	14	26	7	2	51	3	21	19	7	8	28	8	54	11	11	11	40

The above are in Greenwich Time, if local Mean Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 3rd, 8h. 3m. a.m. | New Moon .. 18th, 11h. 0m. a.m.
 Last Quarter. 10th, 5h. 45m. a.m. | First Quarter. 26th, 2h. 59m. a.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgwater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	P.	I.	H.	M.	H.	M.	P.	I.
1	Wednesday	3	15	3	43	27	3	5	6	5	36	15	1
2	Thursday	4	9	4	36	28	6	6	3	6	30	16	8
3	Friday ..	5	3	5	29	29	2	6	57	7	23	17	6
4	Saturday..	5	53	6	16	29	4	7	49	8	12	17	8
5	Sunday ..	6	39	7	2	29	0	8	35	8	58	17	3
6	Monday..	7	26	7	50	28	2	9	21	9	43	16	3
7	Tuesday..	8	15	8	38	26	10	10	6	10	27	14	7
8	Wednesday	9	0	9	23	25	3	10	46	11	6	12	7
9	Thursday	9	47	10	13	23	10	11	26	11	53	10	10
10	Friday ..	10	40	11	9	22	6	..	0	22	9	2	..
11	Saturday..	11	37	..	..	22	0	0	55	1	26	8	6
12	Sunday ..	0	11	0	50	22	0	2	3	2	39	8	6
13	Monday..	1	28	2	0	22	10	3	14	3	44	9	7
14	Tuesday..	2	30	2	58	23	10	4	17	4	47	10	10
15	Wednesday	3	22	3	45	24	8	5	14	5	38	11	10
16	Thursday	4	9	4	28	25	5	6	3	6	22	12	10
17	Friday ..	4	48	5	5	25	11	6	42	6	59	13	5
18	Saturday	5	24	5	41	26	1	7	19	7	36	13	8
19	Sunday ..	5	57	6	13	26	5	7	54	8	10	14	1
20	Monday..	6	30	6	50	26	4	8	26	8	45	13	11
21	Tuesday..	7	6	7	22	26	0	9	2	9	17	13	6
22	Wednesday	7	41	8	1	25	8	9	36	9	53	13	1
23	Thursday	8	23	8	44	25	1	10	13	10	32	12	5
24	Friday ..	9	5	9	27	24	5	10	51	11	10	11	7
25	Saturday..	9	52	10	17	23	9	11	32	11	57	10	9
26	Sunday ..	10	43	11	13	23	3	..	0	27	10	1	..
27	Monday..	11	44	..	..	23	3	0	59	1	34	10	1
28	Tuesday..	0	20	1	2	23	10	2	12	2	50	10	10
29	Wednesday	1	38	2	13	25	1	3	24	3	58	12	5
30	Thursday	2	44	3	15	26	6	4	31	5	6	14	2

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 3rd, 8h. 3m. a.m.	New Moon .. 18th, 11h. 0m. a.m.
Last Quarter.. 10th, 5h. 45m. a.m.	First Quarter. 26th, 2h. 59m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.					Cardiff.					Gloucester.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	3	50	4	18	20	7	4	38	5	8	29	11	5	31	6	1	27	11
2	Thursday..	4	44	5	11	22	2	5	35	6	2	31	9	6	28	6	55	30	3
3	Friday ..	5	38	6	4	23	0	6	29	6	55	32	11	7	22	7	48	31	7
4	Saturday..	6	28	6	51	23	2	7	21	7	44	33	2	8	14	8	37	31	11
5	Sunday ..	7	14	7	37	22	9	8	7	8	30	32	7	9	0	9	23	31	3
6	Monday..	8	1	8	25	21	9	8	53	9	15	31	4	9	46	10	8	29	8
7	Tuesday..	8	50	9	13	20	1	9	38	9	59	29	3	10	31	10	52	27	1
8	Wednesday	9	35	9	58	18	1	10	18	10	38	26	9	11	11	11	31	23	11
9	Thursday..	10	22	10	48	16	4	10	58	11	25	24	6	11	51	..	..	21	2
10	Friday ..	11	15	11	44	14	8	11	54	..	..	22	6	0	18	0	47	18	7
11	Saturday..	..	..	0	12	14	0	0	27	0	58	21	8	1	20	1	51	17	7
12	Sunday ..	0	46	1	25	14	0	1	35	2	11	21	8	2	28	3	4	17	7
13	Monday..	2	3	2	34	15	1	2	46	3	16	23	0	3	39	4	9	19	3
14	Tuesday..	3	5	3	33	16	4	3	49	4	19	24	6	4	42	5	12	21	2
15	Wednesday	3	57	4	20	17	4	4	46	5	10	25	10	5	39	6	3	22	9
16	Thursday..	4	44	5	3	18	4	5	35	5	54	27	0	6	28	6	47	24	3
17	Friday ..	5	23	5	40	18	11	6	14	6	31	27	10	7	7	7	24	25	3
18	Saturday..	6	0	6	16	19	2	6	51	7	8	28	1	7	44	8	1	25	7
19	Sunday ..	6	32	6	48	19	7	7	26	7	42	28	7	8	19	8	35	26	3
20	Monday..	7	5	7	24	19	5	7	58	8	17	28	6	8	51	9	10	26	1
21	Tuesday..	7	41	7	57	19	0	8	34	8	49	28	0	9	27	9	42	25	5
22	Wednesday	8	16	8	36	18	7	9	8	9	25	27	5	10	1	10	18	24	9
23	Thursday..	8	58	9	19	17	11	9	45	10	4	26	6	10	38	10	57	23	7
24	Friday ..	9	40	10	2	17	1	10	23	10	42	25	5	11	16	11	35	22	3
25	Saturday..	10	27	10	52	16	3	11	4	11	29	24	5	11	57	..	..	21	0
26	Sunday ..	11	18	11	48	15	7	11	59	..	..	23	8	0	22	0	52	20	1
27	Monday..	..	..	0	19	15	7	0	31	1	6	23	8	1	24	1	59	20	1
28	Tuesday..	0	55	1	37	16	4	1	44	2	22	24	6	2	37	3	15	21	2
29	Wednesday	2	13	2	48	17	11	2	56	3	30	26	6	3	49	4	23	23	7
30	Thursday..	3	19	3	50	19	8	4	3	4	38	28	9	4	56	5	31	26	5

The above are in Greenwich Mean Time, if local Time be required for Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 3rd, 8h. 3m. a.m. | New Moon .. 18th, 11h. 0m. a.m.
 Last Quarter. 10th, 5h. 45m. a.m. | First Quarter. 26th, 2h. 59m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanally.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	P.	I.	H.	M.	H.	M.	P.	I.
1	Wednesdy	3	25	3	53	21	0	4	0	4	28	21	6
2	Thursday.	4	19	4	46	22	5	4	54	5	21	22	11
3	Friday ..	5	13	5	39	23	1	5	48	6	14	23	7
4	Saturday..	6	3	6	26	23	3	6	38	7	1	23	9
5	Sunday ..	6	49	7	12	22	11	7	24	7	47	23	5
6	Monday..	7	36	8	0	22	0	8	11	8	35	22	6
7	Tuesday..	8	25	8	48	20	7	9	0	9	23	21	1
8	Wednesdy	9	10	9	33	18	10	9	45	10	8	19	4
9	Thursday.	9	57	10	23	17	4	10	32	10	58	17	10
10	Friday ..	10	50	11	19	15	10	11	25	11	54	16	4
11	Saturday..	11	47	..	..	15	3	..	0	22	15	9	..
12	Sunday ..	0	21	1	0	15	3	0	56	1	35	15	9
13	Monday..	1	38	2	9	16	2	2	13	2	44	16	8
14	Tuesday..	2	40	3	8	17	4	3	15	3	43	17	10
15	Wednesdy	3	32	3	55	18	2	4	7	4	30	18	8
16	Thursday.	4	19	4	38	19	0	4	54	5	13	19	6
17	Friday ..	4	58	5	15	19	7	5	33	5	50	20	1
18	Saturday..	5	34	5	51	19	9	6	9	6	26	20	3
19	Sunday ..	6	7	6	23	20	1	6	42	6	58	20	7
20	Monday..	6	40	7	0	20	0	7	15	7	34	20	6
21	Tuesday..	7	16	7	32	19	8	7	51	8	7	20	2
22	Wednesdy	7	51	8	11	19	3	8	26	8	46	19	9
23	Thursday.	8	33	8	54	18	8	9	8	9	29	19	2
24	Friday ..	9	15	9	37	17	11	9	50	10	12	18	5
25	Saturday..	10	2	10	27	17	3	10	37	11	2	17	9
26	Sunday ..	10	53	11	23	16	8	11	28	11	58	17	2
27	Monday..	11	54	..	..	16	8	..	0	29	17	2	..
28	Tuesday..	0	30	1	12	17	4	1	5	1	47	17	10
29	Wednesdy	1	48	2	23	18	8	2	23	2	58	19	2
30	Thursday.	2	54	3	25	20	2	3	29	4	0	20	8

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanally, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 3rd, 8h. 3m. a.m. | New Moon .. 18th, 11h. 0m. a.m.
 Last Quarter. 10th, 5h. 45m. a.m. | First Quarter. 26th, 2h. 59m. a.m.

M. W. D.	Newport.				Swansea.				Liverpool.				London.			
	Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.	
	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1 Wd	4 46	5 16	29 5	5	3 50	4 18	21 7	7	9 19	9 42	..	0 7	..	0 7	..	0 7
2 Th	5 43	6 10	31 6	6	4 44	5 11	23 2	10	4 10	10 26	0 33	0 57	0 33	0 57	..	..
3 Fri	6 37	7 3	32 10	10	5 38	6 4	24 0	10	5 11	11 14	1 20	1 44	1 20	1 44	..	..
4 Sat	7 29	7 52	33 2	2	6 28	6 51	24 2	11	39	..	2 7	2 30	2 7	2 30	..	..
5 Sun	8 15	8 38	32 6	6	7 14	7 37	23 9	0	2	0 25	2 54	3 16	2 54	3 16	..	..
6 Mo	9 1	9 23	31 1	1	8 1	8 25	22 9	0	49	1 13	3 38	4 1	3 38	4 1	..	..
7 Tu	9 46	10 7	28 7	7	8 50	9 13	21 1	1	36	2 0	4 25	4 48	4 25	4 48	..	..
8 Wd	10 26	10 46	25 10	10	9 35	9 58	19 1	2	23	2 46	5 13	5 36	5 13	5 36	..	..
9 Th	11 6	11 33	23 2	2	10 22	10 48	17 4	3	10	3 36	6 0	6 26	6 0	6 26	..	..
10 Fri	..	0 2	20 11	11	11 15	11 44	15 8	4	7	4 42	6 53	7 24	6 53	7 24	..	..
11 Sat	0 35	1 6	19 11	11	..	0 12	15 0	5	20	5 54	7 58	8 35	7 58	8 35	..	..
12 Sun	1 43	2 19	19 11	11	0 46	1 25	15 0	6	35	7 12	9 10	9 46	9 10	9 46	..	..
13 Mo	2 54	3 24	21 6	6	2 3	2 34	16 1	7	46	8 13	10 21	10 56	10 21	10 56	..	..
14 Tu	3 57	4 27	23 2	2	3 5	3 33	17 4	8	40	9 4	11 25	11 53	11 25	11 53	..	..
15 Wd	4 54	5 18	24 9	9	3 57	4 20	18 4	9	25	9 44	..	0 18	..	0 18	..	..
16 Th	5 43	6 2	26 1	1	4 44	5 3	19 4	10	4	10 20	0 39	0 59	0 39	0 59	..	..
17 Fri	6 22	6 39	27 1	1	5 23	5 40	19 11	10	36	10 52	1 20	1 37	1 20	1 37	..	..
18 Sat	6 59	7 16	27 4	4	6 0	6 16	20 2	11	10	11 26	1 54	2 9	1 54	2 9	..	..
19 Sun	7 34	7 50	27 11	11	6 32	6 48	20 7	11	43	11 59	2 26	2 42	2 26	2 42	..	..
20 Mo	8 6	8 25	27 10	10	7 5	7 24	20 5	..	0 16	2 58	3 14	3 14	2 58	3 14	..	..
21 Tu	8 42	8 57	27 3	3	7 41	7 57	20 0	0	36	0 53	3 30	3 48	3 30	3 48	..	..
22 Wd	9 16	9 33	26 7	7	8 16	8 36	19 7	1	9	1 28	4 5	4 21	4 5	4 21	..	..
23 Th	9 53	10 12	25 6	6	8 58	9 19	18 11	1	47	2 8	4 40	4 59	4 40	4 59	..	..
24 Fri	10 31	10 50	24 2	2	9 40	10 2	18 1	2	29	2 50	5 21	5 42	5 21	5 42	..	..
25 Sat	11 12	11 37	23 1	1	10 27	10 52	17 3	3	15	3 42	6 6	6 31	6 6	6 31	..	..
26 Sun	..	0 7	22 3	3	11 18	11 48	16 7	4	12	4 47	6 59	7 29	6 59	7 29	..	..
27 Mo	0 39	1 14	22 3	3	..	0 19	16 7	5	25	6 3	8 3	8 40	8 3	8 40	..	..
28 Tu	1 52	2 30	23 2	2	0 55	1 37	17 4	6	45	7 23	9 18	9 55	9 18	9 55	..	..
29 Wd	3 4	3 38	25 6	6	2 13	2 48	18 11	7	54	8 25	10 32	11 5	10 32	11 5	..	..
30 Th	4 11	4 46	28 1	1	3 19	3 50	20 8	8	52	9 19	11 37	..	11 37	..	..	..

The above are in Greenwich Time, if local Mean Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 3. .

PHASES OF THE MOON.

Full Moon .. 2nd, 6h. 44m. p.m. | New Moon .. 18th, 4h. 45m. a.m.
 Last Quarter. 10th, 0h. 13m. a.m. | First Quarter. 26th, 0h. 31m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgwater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	3	48	4	16	27	6	5	41	6	9	15	5
2	Saturday..	4	43	5	11	28	3	6	37	7	5	16	4
3	Sunday ..	5	38	6	2	28	5	7	33	7	59	16	7
4	Monday..	6	26	6	50	28	4	8	22	8	46	16	5
5	Tuesday..	7	12	7	35	27	9	9	8	9	30	15	9
6	Wednesday	7	57	8	19	27	0	9	50	10	10	14	9
7	Thursday.	8	41	9	1	25	8	10	29	10	48	13	1
8	Friday ..	9	23	9	44	24	7	11	6	11	25	11	9
9	Saturday..	10	5	10	27	23	6	11	45	..	..	10	5
10	Sunday ..	10	50	11	16	22	5	0	7	0	34	9	1
11	Monday..	11	40	..	..	22	0	1	4	1	35	8	6
12	Tuesday..	0	20	0	56	22	0	2	11	2	45	8	6
13	Wednesday	1	32	2	4	22	7	3	18	3	49	9	3
14	Thursday.	2	34	3	3	23	5	4	20	4	52	10	4
15	Friday ..	3	29	3	50	24	4	5	21	5	45	11	5
16	Saturday..	4	15	4	36	25	1	6	8	6	30	12	5
17	Sunday ..	5	0	5	19	25	9	6	54	7	13	13	3
18	Monday..	5	39	5	57	26	0	7	34	7	54	13	6
19	Tuesday..	6	16	6	33	26	3	8	12	8	29	13	10
20	Wednesday	6	52	7	11	26	6	8	48	9	7	14	2
21	Thursday.	7	31	7	52	26	5	9	26	9	47	14	1
22	Friday ..	8	13	8	34	26	2	10	4	10	23	13	9
23	Saturday..	8	55	9	15	25	9	10	42	10	59	13	3
24	Sunday ..	9	37	10	0	25	1	11	18	11	39	12	5
25	Monday..	10	23	10	47	24	4	..	0	3	11	5	11
26	Tuesday..	11	14	11	45	23	9	0	30	1	1	10	9
27	Wednesday	..	0	0	21	23	8	1	35	2	13	10	7
28	Thursday.	1	4	1	43	24	3	2	52	3	29	11	4
29	Friday ..	2	20	2	55	25	2	4	6	4	44	12	6
30	Saturday..	3	28	4	0	26	3	5	20	5	52	13	10
31	Sunday ..	4	32	5	0	27	2	6	22	6	55	15	0

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgwater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 2nd, 6h. 44m. p.m. | New Moon .. 18th, 4h. 45m. a.m.
 Last Quarter .. 10th, 0h. 13m. a.m. | First Quarter. 25th, 0h. 31m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.	Even.	Height		Morn.	Even.	Height		Morn.	Even.	Height	
		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.	
1	Friday ..	4 23	4 51	20 11		5 13	5 41	30 4		6 6	6 34	28 5	
2	Saturday..	5 18	5 46	21 10		6 9	6 37	31 5		7 2	7 30	29 9	
3	Sunday ..	6 13	6 37	22 1		7 5	7 31	31 8		7 58	8 24	30 1	
4	Monday..	7 1	7 25	21 11		7 54	8 18	31 6		8 47	9 11	29 11	
5	Tuesday..	7 47	8 10	21 3		8 40	9 2	30 9		9 33	9 55	28 11	
6	Wednesday	8 32	8 54	20 3		9 22	9 42	29 6		10 15	10 36	27 5	
7	Thursday.	9 16	9 36	18 7		10 1	10 20	27 5		10 54	11 13	24 9	
8	Friday ..	9 58	10 19	17 3		10 38	10 57	25 8		11 31	11 50	22 7	
9	Saturday..	10 40	11 2	15 11		11 17	11 39	24 0		..	0 10	20 6	
10	Sunday ..	11 25	11 51	14 7		..	0 6	22 4		0 32	1 0	18 5	
11	Monday..	..	0 20	14 0		0 36	1 7	21 8		1 29	2 0	17 7	
12	Tuesday..	0 54	1 31	14 0		1 43	2 17	21 8		2 36	3 10	17 7	
13	Wednesday	2 7	2 39	14 9		2 50	3 21	22 7		3 43	4 14	18 9	
14	Thursday.	3 9	3 38	15 10		3 52	4 24	23 11		4 45	5 17	20 5	
15	Friday ..	4 4	4 26	16 11		4 53	5 17	25 3		5 46	6 10	22 1	
16	Saturday..	4 50	5 11	17 11		5 40	6 2	26 6		6 33	6 55	23 7	
17	Sunday ..	5 35	5 54	18 9		6 26	6 45	27 6		7 19	7 38	24 11	
18	Monday..	6 14	6 32	19 0		7 6	7 20	28 0		7 59	8 19	25 5	
19	Tuesday..	6 51	7 8	19 4		7 44	8 1	28 4		8 37	8 54	25 11	
20	Wednesday	7 27	7 46	19 8		8 20	8 39	28 9		9 13	9 32	26 5	
21	Thursday.	8 6	8 27	19 7		8 58	9 17	28 7		9 51	10 11	26 3	
22	Friday ..	8 48	9 9	19 3		9 36	9 55	28 3		10 29	10 48	25 9	
23	Saturday .	9 30	9 50	18 9		10 14	10 31	27 6		11 7	11 24	24 11	
24	Sunday ..	10 12	10 35	17 11		10 50	11 11	26 6		11 44	..	23 7	
25	Monday..	10 58	11 22	16 11		11 35	..	25 3		0 5	0 28	22 1	
26	Tuesday..	11 49	..	16 3		0 2	0 33	24 5		0 55	1 26	21 0	
27	Wednesday	0 20	0 57	16 1		1 7	1 45	24 3		2 0	2 38	20 10	
28	Thursday.	1 39	2 18	16 10		2 24	3 1	25 2		3 17	3 54	21 11	
29	Friday ..	2 55	3 30	18 0		3 38	4 16	26 7		4 31	5 9	23 9	
30	Saturday..	4 3	4 34	19 4		4 52	5 24	28 4		5 45	6 17	25 11	
31	Sunday ..	5 7	5 35	20 6		5 54	6 27	29 9		6 47	7 20	27 9	

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 18m.—Gloucester, *sub.* 10m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 2nd, 6h. 44m. p.m. | New Moon .. 18th, 4h. 45m. a.m.
 Last Quarter . 10th, 0h. 13m. a.m. | First Quarter. 25th, 0h. 31m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	3	58	4	26	21	4	4	33	5	1	21	0
2	Saturday..	4	53	5	21	22	1	5	28	5	56	21	9
3	Sunday ..	5	48	6	12	22	4	6	23	6	47	21	11
4	Monday..	6	36	7	0	22	2	7	11	7	35	21	10
5	Tuesday..	7	22	7	45	21	7	7	57	8	20	21	3
6	Wednesday	8	7	8	29	20	9	8	42	9	4	20	6
7	Thursday.	8	51	9	11	19	3	9	26	9	46	19	2
8	Friday ..	9	33	9	54	18	1	10	8	10	29	18	1
9	Saturday..	10	15	10	37	16	11	10	50	11	12	17	0
10	Sunday ..	11	0	11	26	15	9	11	35	..	16	3	11
11	Monday..	11	50	..	15	3	0	0	1	0	30	15	6
12	Tuesday..	0	30	1	6	15	3	1	4	1	41	15	6
13	Wednesday	1	42	2	14	15	11	2	17	2	49	16	1
14	Thursday.	2	44	3	13	16	10	3	19	3	48	16	11
15	Friday ..	3	39	4	1	17	10	4	14	4	36	17	10
16	Saturday..	4	25	4	46	18	8	5	0	5	21	18	7
17	Sunday ..	5	10	5	29	19	5	5	45	6	4	19	3
18	Monday..	5	49	6	7	19	8	6	24	6	42	19	6
19	Tuesday..	6	26	6	43	19	11	7	1	7	18	19	9
20	Wednesday	7	2	7	21	20	2	7	37	7	56	20	0
21	Thursday.	7	41	8	2	20	1	8	16	8	37	19	11
22	Friday ..	8	23	8	44	19	10	8	58	9	19	19	8
23	Saturday .	9	5	9	25	19	5	9	40	10	0	19	3
24	Sunday ..	9	47	10	10	18	8	10	22	10	45	18	7
25	Monday..	10	33	10	57	17	10	11	8	11	32	17	10
26	Tuesday..	11	24	11	55	17	3	11	59	..	17	9	3
27	Wednesday	..	0	0	31	17	1	0	30	1	7	17	2
28	Thursday.	1	14	1	53	17	9	1	49	2	28	17	9
29	Friday ..	2	30	3	5	18	9	3	5	3	40	18	8
30	Saturday..	3	38	4	9	19	11	4	13	4	44	19	9
31	Sunday ..	4	42	5	10	20	11	5	17	5	45	20	8

The above are in Greenwich Mean Time, if local Time be required for
 Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 3.

PHASES OF THE MOON.

Full Moon .. 2nd, 6h. 44m. p.m. | New Moon .. 18th, 4h. 45m. a.m.
 Last Quarter. 10th, 0h. 13m. a.m. | First Quarter. 25th, 0h. 31m. p.m.

W. D.	Newport.				Swansea.				Liverpool.				London.			
	Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.	
	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.
1 Fri	5	21	5	49	29	11	4	23	4	51	21	11	9	46	10	9
2 Sat	6	17	6	45	31	2	5	18	5	46	22	10	10	32	10	58
3 Sun	7	13	7	39	31	5	6	13	6	37	23	1	11	23	11	48
4 Mo	8	2	8	26	31	3	7	1	7	25	22	11	..	0	12	2
5 Tu	8	48	9	10	30	4	7	47	8	10	22	3	0	36	0	59
6 Wd	9	30	9	50	28	11	8	32	8	54	21	3	1	22	1	43
7 Th	10	9	10	28	26	7	9	16	9	36	19	7	2	4	2	26
8 Fri	10	46	11	5	24	6	9	58	10	19	18	3	2	47	3	10
9 Sat	11	25	11	47	22	8	10	40	11	2	16	11	3	33	3	58
10 Sun	..	0	14	20	9	11	11	25	11	51	15	7	4	24	4	56
11 Mo	0	44	1	15	19	11	..	0	20	15	0	5	5	28	6	4
12 Tu	1	51	2	25	19	11	0	54	1	31	15	0	6	45	7	18
13 Wd	2	58	3	29	21	0	2	7	2	39	15	9	7	49	8	17
14 Th	4	0	4	32	22	7	3	9	3	38	16	10	8	43	9	8
15 Fri	5	1	5	25	24	0	4	4	4	26	17	11	9	31	9	50
16 Sat	5	48	6	10	25	6	4	50	5	11	18	11	10	8	10	26
17 Sun	6	34	6	53	26	9	5	35	5	54	19	9	10	47	11	5
18 Mo	7	14	7	34	27	3	6	14	6	32	20	0	11	24	11	43
19 Tu	7	52	8	9	27	8	6	51	7	8	20	4	..	0	2	2
20 Wd	8	28	8	47	28	1	7	27	7	46	20	8	0	19	0	38
21 Th	9	6	9	27	27	11	8	6	8	27	20	7	0	58	1	18
22 Fri	9	44	10	3	27	6	8	48	9	9	20	3	1	38	1	58
23 Sat	10	22	10	39	26	9	9	30	9	50	19	9	2	19	2	41
24 Sun	10	58	11	19	25	6	10	12	10	35	18	11	3	2	3	26
25 Mo	11	43	..	24	0	10	10	58	11	22	17	11	3	52	4	19
26 Tu	0	10	0	41	23	1	11	49	..	17	3	4	4	51	5	25
27 Wd	1	15	1	53	22	11	0	20	0	57	17	1	6	4	6	46
28 Th	2	32	3	9	23	11	1	39	2	18	17	10	7	25	7	59
29 Fri	3	46	4	24	25	8	2	55	3	30	19	0	8	31	9	2
30 Sat	5	0	5	32	27	8	4	3	4	34	20	4	9	30	9	55
31 Sun	6	2	6	35	29	3	5	7	5	35	21	6	10	28	10	56

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 3.

PORT CHARGES, &c.

APPLEDORE.

Mooring, 1s.

Pilotage, as per agreement.

BARNSTAPLE.

Keelage, 4d. per ton register.

Pilotage, as per agreement.

BIDEFORD.

Harbour Dues.—Vessels discharging at public quay, $\frac{1}{2}$ d. per ton register; at private wharf, 2s. 6d. Pilotage, as per agreement.

BRIDGWATER.

Pilotage.

From the extreme limits of the navigation in the Bristol Channel or from any point between such extreme limits and Burnham Church to the Town or to any point between the Black Rock and the Town the vessel being safely moored; also from the Town to the limit of the navigation, or to any point between Burnham Church and the said limits, the following Rates, viz. :—

			£	s.	d.
On vessels of 30 tons and under	.....		0	6	6
On vessels above 30 tons and under 50 tons.			0	8	0
„ 50	„ 65	....	0	10	0
„ 65	„ 80	....	0	12	6
„ 80	„ 100	....	0	15	0
„ 100	„ 120	....	1	0	0
„ 120	„ 150	....	1	11	0
„ 150	„ 200	....	2	11	0
„ 200	„ 300	....	3	6	0
„ 300	„	.....	4	1	0

Bridgwater, continued.

From Burnham Church, or from any point between Burnham Church and the Town, to the Town, or to any intermediate point, the vessel being safely moored, and *vice versa*.

		£	s.	d.
On vessels of 30 tons and under		0	4	6
On vessels above 30 tons and under 50 tons.		0	5	6
" 50	" 65	0	6	6
" 65	" 80	0	7	6
" 80	" 100	0	8	6
" 100	" 120	0	10	6
" 120	" 150	1	6	0
" 150	" 200	2	1	0
" 200	" 300	2	11	0
" 300	"	3	4	0

The above Rates are subject to a reduction of one-fourth part in respect of vessels towed by steam vessels.

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first-mentioned ships shall, by any order of Her Majesty's Most Honourable Privy Council be privileged to enter the ports of this kingdom, upon paying the same Dues of Tonnage as are paid by British ships; in which case, such ships and vessels not having British registers, shall pay the like Rates of Pilotage only, as are payable by ships having British registers.

If a master choose to employ a pilot for a tide in the navigation, the pilot shall be entitled to receive for such service, two shillings and sixpence for each tide.

Towage.

To or from Burnham, Black Rock, or any intermediate Place, where a vessel shall stop or get aground (*for one tide only*;) viz:—
Vessels—Light, under one hundred tons register, 3d. per ton; ditto above, 4d. per ton. (If any goods, 1d. per ton extra.)

Vessels with coal or culm, under 10 feet of water, 3d. per ton; 10 feet, 4d. per ton; 12 feet, 5d. per ton.

Vessels with merchandize, or ballast, 4d. per ton; 10 feet of water, 5d. per ton; 11 feet, 6d. per ton; 12 feet, 7d. per ton.

To or from the Gore to Burnham, or any intermediate place, 3d. per ton. To or from Burnham to Cumbwitch, or any intermediate place, 3d. per ton.

Two-pence per ton over the above Rates will be charged for towing up, in all cases where other tugs are employed to tow down.

Should any vessel require a tug, or aid for more than one tide, such assistance must be paid for in addition to the above rates, according to the services rendered.

Harbour Dues.

One penny per ton register, with 1s. fee for moorage.

*Bridgwater, continued.***Tonnage Rates.****First Class**—Vessels entering with cargoes or departing with cargoes

INWARDS. —For every ship or other vessel which shall enter the said basin, from any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney, and Sark—per ton measurement ..	0
From any other part of Europe except places within the Straits of Gibraltar, and round the North Cape, and from all British Colonies—per ton measurement ..	0
From any port or place in Europe round the North Cape, any port or place within the Straits of Gibraltar whether in Europe, Asia, or Africa, and any port or place in the United States of America—per ton measurement ..	0
From any port or place in any other part of the world—per ton measurement ..	0

OUTWARDS. —For every ship or vessel which shall depart from the said basin to any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney, and Sark,—per ton measurement ..	1
To any other port of Europe, except places within the Straits of Gibraltar, and round the North Cape, or to any British Colony,—per ton measurement ..	0
To any port or place in Europe round the North Cape, any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa; any port or place in the United States of America—per ton measurement ..	0
To any port or place in any other part of the world—per ton measurement ..	0

Second Class—Vessels entering without Cargoes or in ballast

For every ship or other vessel which shall enter into the said basin—per ton measurement ..	0
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Third Class —For every ship or other vessel with a cargo which shall enter the said basin and depart therefrom without breaking bulk, or which shall discharge and afterwards take on board and depart with the same cargo—per ton measurement ..	0
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And in estimating the dues contained in this schedule, every vessel of less burthen than twenty tons measurement, shall be rated at twenty tons measurement.

Extra basin dues for overtime —For every coal vessel remaining in the basin beyond ten days, for every coasting vessel beyond fourteen days, and for every foreign vessel beyond thirty days from the time of their respectively entering the same—per ton measurement, per month ..	0
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BRISTOL.

Rates or Fares for Pilotage.

	If 80 and under 100 tons.		If 100 and under 300 tons.		If 300 and under 500 tons.		If 500 and under 800 tons.		If 800 and under 1000 tons.		If 1000 tons and upwards.	
	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.
BETWEEN												
Lundy and Coombe	1	1 0	1	8	1	15 0	2	2	2	9 0	2	16 3 0
Lundy and Swansea or Minehead	2	2 0	2	16 3 10	0	4 4	4 4	18 0	5	12 6 0	7	0
Lundy and Bridgwater, Cardiff, or the Holmes	2	12 6	3	10 4	7 6	5 5	6 2	6 7 0	7	17 6	8	15
Lundy and Newport or Kingroad	3	3 0	4 4	5 5	0 6 6	6 6	7 7 0	8 8	9 9 0	10 10		
Coombe and Minehead	1	1 0	1	8	1 15 0	2	2 2	2 9 0	2	16 3 0	3	10
Coombe and Bridgwater, Cardiff, or the Holmes	1	11 6	2 2	2 12 6	3 3	3 3	13 6	4 4	4 14 6	5 5		
Coombe and Newport or Kingroad	2	2 0	2 16 3	10 0	4 4	4 4	18 0	5 12 6	6 0	7 0		
Minehead and Bridgwater, Cardiff, or the Holmes	0	10 6	0 14	0 17 6	1 1	1 1	4 6	1 8	1 11 6	1 15		
Minehead and Newport or Kingroad ..	1	1 0	1 8	1 15 0	2 2	2 2	9 0	2 16 3	3 0	3 10		
Between any of the following places:— Portishead, Kingroad, Hungroad, Broad Pill, Cumberland or Bathurst Basins, and any other of such places*	0	10 0	0 15	1 0 0	1 0 0	1 5	1 10 0	1 15	2 0 0	2 5		
Between any two of the following places, viz:—Bridgwater, Cardiff, the Holmes, Newport and Kingroad	0	10 6	0 14	0 17 6	1 1	1 1	4 6	1 8	1 11 6	1 15		

* If under 80 tons, 7s. 6d.

*Bristol, continued.***Harbour Dues.****£ s. d.**

For every vessel trading from Africa, Honduras, Surinam, and other ports in South America, the United States of America, the East and West Indies, all the ports within the Straits of Gibraltar, the Southern Whale Fishery, the British Colonies, Portugal, Prussia, Russia, Spain, without the Straits, and Sweden—per ton	0	1	2
For every vessel trading from Flanders, France, without the Straits, Germany, Guernsey, Holland, Jersey, Norway, Poland, and Zealand—per ton	0	0	7
For every vessel trading from Ireland, the Isle of Man, Scotland, or as a Coaster, not including vessels from Cardiff, Newport, and other ports to the Eastward of the Holmes—per ton	0	0	5
For every vessel from Cardiff, Newport, or any other port to the Eastward of the Holmes (not being vessels one-third part of the lading of which shall consist of coal, scroff, iron, tin, tin plates, grain, copper, bricks, stone, coal, tar, slate, bark, timber, or wood,) as follows:—			
If such vessel shall be under forty tons burthen—for each voyage	0	7	6
If such vessel shall be forty tons burthen, and under seventy-five tons—for each voyage	0	12	6
If such vessel shall be seventy-five tons burthen, and under one hundred tons—for each voyage	0	16	0
If such vessel shall be one hundred tons burthen or upwards—for each voyage	1	1	0
For every vessel from Cardiff, Newport, or any other port to the Eastward of the Holmes, one-third part of the lading of which shall consist of coal, scroff, iron, tin, tin plates, grain, copper, bricks, stone, coal, tar, slate, bark, timber, or wood, as follows:—			
If such vessel shall not exceed seventy-five tons burthen—for each voyage	0	5	0
If such vessel shall exceed seventy-five tons burthen—for each voyage	0	7	6
N.B.—There are no Dock Rates or other Port Charges payable on vessels leaving the Port of Bristol.			

BRITON-FERRY.**Pilotage.**

From outside of Neath Bar.

Vessels under 40 tons register	7s.	0d.
Vessels over 40 and under 60 tons register.....	10s.	0d.
With or without Steam.		

Briton-Ferry, continued.

For vessels over 60 tons register the rates are as follows:—

Draught of Water.	Without Steam.			With Steam.			Draught of Water.	Without Steam.			With Steam.		
	£	s.	d.	£	s.	d.		£	s.	d.	£	s.	d.
8 feet ..	0	11	3	0	8	5	13½ ft. ..	1	2	6	0	16	11
9 " ..	0	12	0	0	9	0	14 " ..	1	8	0	1	1	0
9½ " ..	0	12	6	0	9	5	14½ " ..	1	13	6	1	5	2
10 " ..	0	13	0	0	9	9	15 " ..	2	1	6	1	11	2
10½ " ..	0	13	6	0	10	2	15½ " ..	2	10	6	1	18	0
11 " ..	0	14	0	0	10	6	16 " ..	3	1	0	2	5	9
11½ " ..	0	14	6	0	10	11	16½ " ..	3	12	0	2	14	0
12 " ..	0	15	9	0	11	10	17 " ..	4	5	6	3	4	2
12½ " ..	0	16	10	0	12	8	17½ " ..	4	19	0	3	14	3
13 " ..	0	18	6	0	14	2	18 " ..	5	13	0	4	5	0
13½ " ..	1	0	6	0	15	5	And 10s. for every ½ ft. over 18 ft.						

Towage.

Under 150 tons register.....	Inwards	1½d. per ton register
" 150 "	Outwards	2d. "
Over 150 in and out.....	.....	2d. "

Harbour Dues.

Coastwise or Foreign	1½d. per ton register
Layrage	1s. 6d. each vessel

Loading Charges.

Trimming coal, on cargo	2½d. per ton
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Discharging Ballast.

Without reference to quantity—about 1½d. per ton on cargo.

BURRY PORT.**Harbour Dues.**

For every ship, barge, boat, or other vessel coming into or going out of the harbour of Burry Port, according to its tonnage, (except packing freight,) the sum of fourpence per ton.

For every ship, barge, boat, or other vessel running into the inner harbour by stress of weather, and not unloading, the sum of sixpence per ton, and the outer harbour, the sum of fourpence per ton.

For every ship, barge, boat, or other vessel coming into the inner harbour from stress of weather, and lying longer than seven days, the sum of threepence per ton per day, and into the outer harbour the sum of twopence per ton per day.

For every ship, barge, boat, or other vessel coming into the outer harbour to seek a freight, of whatever tonnage, and not remaining beyond three days, the sum of one shilling.

For every day exceeding three days, one shilling per day.

*Burry Port, continued.***Stemming Rates.**

Vessels not exceeding 20 tons register, 6d. ; 50 tons, 1s. ; 70 tons, 1s. 6d. ; 100 tons, 2s. ; exceeding 100 tons, 2s. 6d.

Ballast.

For wheeling, per ton register, Outer Harbour, 1d. ; Inner Harbour, 1½d.

For use of planks, barrows, and wagons—

	s.	d.		s.	d.
Not above 100 tons register	1	6	Not above 350 tons register	3	6
„ 150 „	2	0	„ 400 „	4	0
„ 200 „	2	6	Above 400 „	4	6
„ 300 „	3	0			

Men to be allowed 1s. for assisting to trip the basket, and the same extra charge for the use of crane and tubs, if required.

For Pilotage, see Llanelly.

BURNHAM.

Harbour Dues, 2d. per ton register. **Beacons**, 4s. per vessel.

Pilotage, as per agreement.

CARDIFF.**Pilotage Rates.**

The limit of this Pilotage is the Port of Cardiff and that portion of the Bristol Channel which lies eastward of Lundy Island, up to and including Kingroad and the River Rhymney to Rhymney Bridge. This Pilotage is not compulsory, but may be obtained over all or any portion of this district, at the discretion of the Masters of Vessels.

Harbour Pilotage.—Every licensed pilot employed in taking a ship or vessel between any dock or harbour in the port of Cardiff and any point in Cardiff Roads, or *vice versa*, shall be paid according to the registered tonnage of such vessel, as follows:—

FOR LADEN VESSELS.			£	s.	d.
If under 60 tons	.....		0	5	0
60 tons and under 100 tons	.....		0	7	6
100 „ 200 tons	.....		0	12	6
200 „ 300 tons	.....		0	17	6
300 „ 400 tons	.....		1	1	0
400 „ 500 tons	.....		1	5	0
500 „ 600 tons	.....		1	7	6
600 „ 800 tons	.....		1	10	0
800 „ 1000 tons	.....		1	15	0
1000 tons and upwards	.....		2	0	0

For all vessels in ballast, the charges to be one-fifth less than the above rates.

Cardiff, continued.

Channel Pilotage.—Any ship or vessel sailing to or from the port of Cardiff, upon or in the waters of the Bristol Channel between Lundy Island and Kingroad, for which the services of a duly licensed pilot may be required and rendered, shall pay according to the registered tonnage of such vessel, as follows:—

FOR LADEN VESSELS.

	1st Limit.			2nd Limit.			3rd Limit.		
	£	s.	d.	£	s.	d.	£	s.	d.
If under 100 tons	0	7	6	0	17	6	1	5	0
100 tons and under 200 tons ...	0	10	0	1	5	0	1	15	0
200 " 300 tons ...	0	15	0	1	12	6	2	10	0
300 " 400 tons ...	0	17	6	1	17	6	2	17	6
400 " 500 tons ...	1	0	0	2	2	6	3	5	0
500 " 600 tons ...	1	2	6	2	7	6	3	15	0
600 " 800 tons ...	1	5	0	2	15	0	4	5	0
800 " 1000 tons ...	1	10	0	3	5	0	5	5	0
1000 tons and upwards	1	15	0	3	15	0	6	0	0

For all vessels in ballast, the charges to be one-fifth less than the above rates.

FIRST LIMIT.—Between Cardiff Roads and Nash or Kingroad, or any point east of Nash, and west of Kingroad.

SECOND LIMIT.—Between Cardiff Roads and Combe, or any point west of Nash and east of Combe.

THIRD LIMIT.—Between Cardiff Roads and Lundy Island, or any point west of Combe.

Any pilot who may be required to remain on board any ship or vessel for the convenience of the captain, master, owner, or agent, after he shall have discharged the duties for which he was engaged, shall be paid ten shillings per day for every day he may be employed, and any pilot who may be required to move any ship or vessel from one dock or tidal harbour to another dock or tidal harbour, occupying only one tide, shall be paid for every ship

	s.	d.
Not exceeding 100 tons register.....	5	0
100 and not exceeding 300 " 	10	0
300 " 500 " 	12	6
500 " 800 " 	17	6
800 and upwards	25	0

Every captain, master, owner, or agent of any ship or vessel employing a pilot shall, in addition to the aforesaid charges, pay a Clerk or Collector's fee, as follows:—

	s.	d.
On all ships not exceeding 100 tons register	0	6
From 100 " 300 " 	1	0
" 300 " 500 " 	1	6
" 500 " 800 " 	2	0
" 800 and upwards	2	6

Cardiff, continued.

If from stress of weather or accident, any ship or vessel be compelled to bear up and return from the westward, the pilot in charge shall, upon completion of his engagement, be entitled to one-third pilotage, for the distance for which he may have been engaged, in addition to the fixed rates.

Towage.

Inwards, in ballast	1½d. per ton register
„ with cargo	2d. „
Outwards „	2d. per ton

Town Dues.

Under 60 tons register	2s. 6d. per vessel
Above 60 tons register	5s. 0d. „

Loading Charges.

Trimming coal (single deck)	2½d. per ton cargo
„ (double deck)	3d. „
Wharfage on cargo	2d. „

Discharging Ballast.

Vessels under 200 tons	5d. per ton on quantity
200 tons and under 400 tons	6d. „
400 „ 600 tons	7d. „
600 „ 800 tons	8d. „
800 and upwards	9d. „

Tonnage Rates.—Bute Docks.

FIRST CLASS. —On all sailing or steam vessels entering with and departing with cargoes from or departing with cargoes for any port in the United Kingdom, Isle of Man, Jersey, Guernsey, Alderney, and Sark, under 100 tons register				per register ton	0 1
100 tons and under 200 tons register				ditto	0 2
200 tons register and upwards (except steam vessels) ditto				ditto	0 3
Steam vessels 200 tons register and upwards				ditto	0 2

Rent, after three weeks from date of entrance,
per register ton, per week 0 0½

SECOND CLASS. —On all sailing or steam vessels with cargoes from or departing with cargoes for any port in Europe, between the North Cape and Cape Finisterre..				per register ton	0 5
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Rent, after three weeks from date of entrance,
per register ton per week 0 0½

THIRD CLASS. —On all sailing or steam vessels with cargoes from or departing with cargoes for any port in Europe, and the Mediterranean				per register ton	0 7
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Rent, after three weeks from date of entrance,
per register ton per week 0 0½

Cardiff, continued.

FOURTH CLASS.—On all sailing or steam vessels with cargoes from or departing with cargoes for all other foreign ports whatsoever per register ton 0 9

Rent, after three weeks from date of entrance,
per register ton per week 0 0½

FIFTH CLASS.—On all sailing or steam vessels entering light, or in ballast, and departing in ballast..... per register ton 0 3

Rent, after three weeks from date of entrance,
per register ton per week 0 0½

SIXTH CLASS.—On all sailing or steam vessels which shall enter laden, and depart without breaking bulk; or which shall discharge and re-load, and depart with the same cargo per register ton 0 6

Rent, after three weeks from date of entrance,
per register ton per week 0 0½

On every boat, barge, or other craft, which shall enter from the Glamorganshire Canal, and pass through the Dock into the Bristol Channel per register ton 0 6

On every ship, boat, barge, craft, lighter, or other vessel, which shall enter the ship canal, basin, or dock for the purpose of unloading from, or discharging goods, wares, and merchandise, on board of any ship, boat, barge, craft, lighter or other vessel, being within the said ship canal, basin or dock; such and the like rates and duties, upon the goods so discharged or loaded, as are taken for wharfage rates, on goods to be landed or loaded upon, or from the wharfs, or quays, of the dock, basin, or jetties.

On all steam or other vessels, which do not enter within the sea gates of the docks, but which shall either discharge or receive passengers or goods, upon any of the piers, or jetties, outside those gates..... per register ton 0 2

Bute Tidal Harbour.

On all sailing or steam vessels, discharging or loading,
per register ton 0 0½

CARMARTHEN.**Harbour Dues.**

	s.	d.		s.	d.
Vessels under 30 tons	1	0	Vessels 80 to 90 tons	2	6
30 to 60 tons	1	6	90 to 110 tons	3	0
60 to 80 tons	2	0	110 tons and upwards	5	0

Pilotage, as per agreement.

N

CHEPSTOW.**Harbour Dues.**

One penny per ton register, on all vessels loading or unloading alongside a wharf; also, on all vessels entering or departing the river, if from or to the eastward of the Holmes, 4d; from or to the westward of the Holmes, 2s. 4d.

Pilotage.—The same as Gloucester.

CLOVELLY.**Harbour Dues.**

Vessels not exceeding 20 tons, 1s.; 20 to 50 tons, 2s.; above 50 tons, $\frac{1}{4}$ d. per ton.

Pilotage, &c., as per agreement.

GLOUCESTER & BERKELEY CANAL.**Rates of Tonnage,**

Charged upon GROSS and REGISTER weight, and on the ton of 20 cwt. of 112 lbs.

IMPORTS.					Foreign.		Coast-wise.	
					s.	d.	s.	d.
ALE, beer, porter, cider and perry, per brl. of 36 galls.					0	4	0	4
— ditto, in bottle per dozen					0	1	0	1
Barilla per ton					1	6	1	0
Bricks, for building per 1000					2	0	2	0
— scouring, fire, and tiles per ton					2	0	1	0
Brimstone „					1	6	1	0
Bones „					1	0	1	0
Burr stones „					1	6	1	0
Clay „					0	6	0	6
Coals „					0	6	0	6
CORN AND MEAL								
Wheat, and all corn and seed „					1	9	1	6
Flour and other meal „					2	0	2	0
Bran and gurgeons „					1	6	1	6
Earths „					1	0	1	0
Gunpowder „					5	0	5	0
Kelp „					1	6	1	6
Marble per ton of 14 cubic ft.					1	6	1	6
Manure per ton					1	0	1	0
METALS AND ORES								
Copper, spelter, tin, zinc and manganese ..					2	0	0	9
Metallic ores „					0	9	0	6
Pig iron, and old or loose iron „					2	0	0	9
All other descriptions of iron „					2	0	0	9

Gloucester and Berkeley Canal, continued.

IMPORTS, continued.

					Foreign.	Coasting
					s. d.	s. d.
Oil cake	..	..	..	per ton	1 6	1 0
Oysters	..	..	..	per ton of 10 bushels	1 6	1 6
Potatoes	..	..	..	per ton	1 0	1 0
Plates, for roofing	..	..	..	"	2 0	1 6
— for draining	..	..	..	"	2 0	1 0
— slabs, for paving, &c.	..	..	..	"	2 0	1 0
Same, for roads, pitching, lime, chalk, flint, gravel, and sand	..	..	..	"	0 6	0 6
— for building, block, paving, &c.	..	..	..	"	1 0	1 0
— burr stones	..	..	..	"	1 6	1 0
Spirits and wine	..	..	..	per pipe, pun. or butt	2 6	2 6
—	..	..	..	per half ditto or hogshead	1 3	1 3
—	..	..	..	all casks under	0 6	0 6
— in bottle	..	..	..	per dozen	0 1	0 1
WOOD AND WOOD GOODS						
Mahogany and fine woods*	..	..	..	per ton	2 0	2 0
Other timber and poles†	..	..	..	"	1 6	1 6
Lathwood	..	..	..	per fathom of 4 feet	2 0	2 0
Deals and battens, per Petersburg standard of 120, 12 ft. long, 11 in. wide, and 1½ in. thick	..	..	..		3 4	3 4
Staves, Baltic pipe	..	..	..	per 120	3 6	3 6
— Puncheon and hogshead	..	..	..	"	3 0	3 0
— Quebec standard	..	..	..	"	1 6	1 6
— Barrel	..	..	..	"	1 0	1 0
— West India Pun.	..	..	..	"	0 6	0 6
— New Brunswick small	..	..	..	"	0 3	0 3
Laths	..	..	..	per 1000	0 4	0 4
UNENUMERATED ARTICLES	..	..	..	per ton	2 0	1 0

EXPORTS.

Bark	..	..	..	per ton	0 6	1 0
Brick of all kinds	..	..	..	"	0 6	0 6
Clays	..	..	..	"	0 6	0 6
Coals	..	..	..	"	0 6	0 6
Corn, flour, and meal	..	..	..	"	0 6	0 6
METALS AND ORES						
Metallic ores	..	..	..	"	0 6	0 6
" Puddle bars," Pig iron, and rough cast-iron pipes	..	..	..	"	0 6	0 6
All other description of iron and metals	..	..	..	"	0 6	0 9
Salt	..	..	..	"	0 6	0 6
UNENUMERATED ARTICLES	..	..	..	"	0 6	1 0

* Mahogany, Oak, Ash, Elm, Beech, and other heavy Timber or Wood, 40 feet to the ton.

† Fir, Pine, Deal, and light Woods, 50 feet to the ton.

*Gloucester and Berkeley Canal, continued.***Regulations.**

Tonnage.—One half of the above Rates shall be charged upon goods conveyed along any part of the canal between the Stroud Junction and Sharpness Point, or the Stroud Junction and Gloucester, excepting goods coming under the operation of the 8th, 9th, or 10th, regulations.

If it be proved, to the satisfaction of the toll collectors, that the full rate of tonnage has been paid upon any goods which have passed along the canal, half the full tonnage only shall be charged on such goods repassing along the canal, unless such half rate shall exceed the amount of the export rate, in which case the export rate upon such goods shall be charged.

All goods brought into the canal for sale, and not sold, and then exported in the same bottom, without being landed, shall only be charged with the import rate.

All goods exported in the same bottom, or transhipped for export, shall be charged with the import rate.

All goods brought into the canal, forming part of a cargo, the original destination of such goods being for any other port than Gloucester, and not landed nor transhipped, shall pass in and out of the canal free of charge, the vessel carrying such goods paying lockage.

All vessels partly laden entering the canal at Sharpness or Gloucester, to complete their cargoes, shall only be charged tonnage rates on the merchandize shipped in the canal, and the usual lockage charges; provided such inward lading is not landed nor transhipped.

All goods brought into the canal at Gloucester or Sharpness, either by land or water conveyance, and intended for exportation, shall not be charged the tonnage rates until shipped.

All Corn brought to Gloucester from Stroud by the canal shall pay a rate of 4d. per ton, and all Flour, Bran, and Gurgeons so brought, shall pay a rate of 6d. per ton.

All goods brought into the canal at Gloucester, by the Severn, from places above Gloucester, or to the docks at Gloucester, by land carriage, and not conveyed upon the canal below Hempstead Bridge, except goods coming under the 10th regulation, shall pay a rate of 4d. per ton, or the rate by the table, if it be less than 4d.

All goods simply crossing the canal from the South Wales Railway Quay to the yards on the opposite side, lying to the north of the Salt Warehouses, or *vice versa*, not having previously paid canal dues, shall pay a rate of 2d. per ton.

Wharfage.—Goods remaining upon the wharfs (except the wharf specified in the foregoing regulation,) for above *forty-eight hours*, *twopence* per ton. And all goods remaining upon any of the wharfs, excepting the north wharf, shall be further charged wharfage at

Gloucester and Berkeley Canal, continued.

the rate of *twopence* per ton per week, and at that rate for any part of a week they may so remain after the expiration of the forty-eight hours. And all goods remaining upon the "*North Wharf*," shall be further charged wharfage at the rate of *one shilling* per ton per week, and at that rate for any part of a week they may so remain, after the expiration of the forty-eight hours.

All goods deposited upon the wharf underneath the "*Pillar Warehouse*," upon the west side of the basin, and remaining there longer than twenty-four hours, shall be charged *1d.* per ton per day.

Goods, carriages of every description, and all other things, shall only be placed on the wharfs, roads, and premises of the Canal Company in such manner, and on such parts thereof as the officers of the Company may direct; and if any goods, carriages, or other things shall be placed contrary to their directions, the officers of the Company may remove the same; and wharfage at the rate of *6d.* per ton per hour shall be charged, after notice shall have been given to remove the same.

Floatage of Timber.—For timber discharged from vessels into the canal, on the south side of "*Siller's Bridge*," and remaining afloat on the south side of such bridge, after the expiration of thirty days, a floatage rate of one halfpenny per stick per week shall be paid, and in like proportion for any part of a week; and if such timber should be removed to any part of the canal, on the north side of such bridge, a floatage rate of *1d.* per stick for the first week after such removal, and *2d.* per stick per week afterwards, and in like proportion for any part of a week, shall be paid.

For timber discharged from vessels into the canal, on the north side of "*Siller's Bridge*," and remaining afloat on the north side of such bridge, after the expiration of fifteen days, a floatage rate of *1d.* per stick per week shall be paid, and in like proportion for any part of a week; and should it remain afloat on the north side of such bridge longer than twenty-eight days, after the fifteen days, *2d.* per stick per week, and in like proportion for any part of a week, shall be paid.

All timber sold and delivered from one merchant to another, and put into the canal from the yards, and floating in the canal or basins two weeks following, shall pay *2d.* per stick per week, and in like proportion for the whole time it may remain afloat. And all timber imported in trows or barges discharged into the canal, shall be subject to the same regulation and charge.

No timber shall be permitted to remain afloat, so as to endanger the navigation of any vessel along the canal, or interrupt or render inconvenient the navigation of the Canal.

*Gloucester and Berkeley Canal, continued.***Cranage.**

			£	s.	d.	
For each lift under	2 tons	..	0	0	3	per ton.
2 tons and under	5 "	..	0	0	6	"
5 "	6 "	..	0	10	0	for each lift.
6 "	7 "	..	0	12	0	"
7 "	8 "	..	0	16	0	"
8 "	9 "	..	1	2	0	"
9 "	10 "	..	1	10	0	"
10 tons.....			2	0	0	"

All lifts exceeding 10 tons can only be made by special agreement with the Company, and at rates not less than 10s. for every ton above the preceding.

			£	s.	d.	
10 tons and under	11 tons..		2	0	0	for each lift.
11 "	12 "	..	2	10	0	"
12 "	13 "	..	3	0	0	"
13 "	14 "	..	3	10	0	"
14 "	15 "	..	4	0	0	"

Lockage.—Every vessel passing through the Company's locks, empty or in ballast, shall pay 1d. per ton on the register tonnage for each lock of water; and every vessel bringing into, or conveying along the Canal, a less quantity of goods than her register tonnage, shall pay a 1d. per ton per lock on the difference between the tonnage of the goods on board and the register tonnage of the vessel—provided that the hold of the vessel is not full.

In all cases of removal of goods, wares, and merchandize, from the Company's wharfs or docks, through the locks, upon which the above rates of tonnage have been paid, such further payment only shall be made as will amount to 1d. per ton on the register tonnage of the vessel departing with such goods.

Moorage.—All vessels remaining in the Canal or basins longer than one calendar month, shall be charged upon the register tonnage, the following rates, viz.:—One halfpenny per ton per week, if such vessels shall be moored, or remain on the north side of Hempstead Bridge, and one farthing per ton per week, if moored, or remaining in any part of the Canal below Hempstead Bridge.

Lockage and Moorage.—Boats and vessels under twenty tons burthen shall be rated as twenty tons.

Weighing Machine Rates.—For coal, manure, stone, and gravel, 2d. per ton; all other goods, 3d. per ton.

Tracking.—The following scale of charges shall be paid by the masters of vessels for tracking, viz.:—

For the whole length of the Canal,

„ above 26 and not exceeding 150 tons 4d. per ton.

„ above 150 { for 150 tons 4d. „
 „ { for the remainder..... 2½d. „

One-half of the above rates shall be paid to and from the Junction, and $\frac{1}{4}$ d. per ton per mile for all intermediate distances.

Ballast

	s.	d.
If put on board at the Ballast Banks.....	0	8 per ton.

If brought in carts, or alongside afloat, either at Gloucester, or within two miles thereof.....	1	0	..
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If thus taken in carts or afloat at any other part of the Canal	1	2	„
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If in the Tidal Basin at Sharpness.....	1	6	"
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All ballast not supplied by the ballast contractor will be charged tonnage at the rate of 6d. per ton.

Canal Pilotage.

The Canal Pilots are authorized to demand and take the following charges for Piloting Vessels up or down the Canal.

Vessels under 75 tons register 5s. 0d. up or down

Vessels 75 and under 100 tons register.. 7s. 6d.

Register Tonnage	Draft of Water.		Charge.		Register Tonnage	Draft of Water.		Charge.	
	ft.	in.	s.	d.		ft.	in.	s.	d.
100 ..	11	0	..	10 0	375 ..	13	9	..	21 0
125 ..	11	3	..	11 0	400 ..	14	0	..	22 0
150 ..	11	6	..	12 0	425 ..	14	3	..	23 0
175 ..	11	9	..	13 0	450 ..	14	6	..	24 0
200 ..	12	0	..	14 0	475 ..	14	9	..	25 0
225 ..	12	3	..	15 0	500 ..	15	0	..	26 0
250 ..	12	6	..	16 0	525 ..	15	3	..	27 0
275 ..	12	9	..	17 0	550 ..	15	6	..	28 0
300 ..	13	0	..	18 0	575 ..	15	9	..	29 0
325 ..	13	3	..	19 0	600 ..	16	0	..	30 0
350 ..	13	6	..	20 0					

And 6d. additional for every three inches draft of water above.

Channel and River Pilotage.

LIMIT.—The Bristol Channel eastward of Lundy Island, including the River Severn to the City of Gloucester and the River Wye to Chepstow Bridge.

Every licensed pilot employed in piloting vessels to or from the port of Gloucester shall be paid the following Pilotage Rates, according to the register tonnage of the vessel.

Gloucester and Berkeley Canal, continued.

			To or from Lundy and								
			Holmes or Cardiff Roads			Kingroad			Sharpness		
			£	s.	d.	£	s.	d.	£	s.	d.
Under 100 tons	.....		1	10	0	2	0	0	4	0	0
100 tons and under 200			2	0	0	2	10	0	5	0	0
200	"	300	2	7	6	3	0	0	6	0	0
300	"	400	2	15	0	3	10	0	7	0	0
400	"	500	3	5	0	4	2	6	8	5	0
500	"	600	3	15	0	4	15	0	9	10	0
600	"	800	4	5	0	5	7	6	10	15	0
800	"	1000	5	0	0	6	5	0	12	10	0
1000 tons and upwards..			5	15	0	7	5	0	14	10	0

			To or from Nash Point or Minehead and Holmes or Cardiff Roads								
			£	s.	d.	£	s.	d.	£	s.	d.
Under 100 tons	.....		1	0	0	1	10	0	3	10	0
100 tons and under 200			1	5	0	1	15	0	4	5	0
200	"	300	1	10	0	2	2	6	5	2	6
300	"	400	1	15	0	2	10	0	6	0	0
400	"	500	2	2	6	3	0	0	7	2	6
500	"	600	2	10	0	3	10	0	8	5	0
600	"	800	2	17	6	4	0	0	9	7	6
800	"	1000	3	7	6	4	12	6	10	17	6
1000 tons and upwards..			3	17	6	5	7	6	12	12	6

			To or from Holmes or Cardiff Roads and Kingroad					
			£	s.	d.	£	s.	d.
Under 100 tons	.....		0	10	0	2	10	0
100 tons and under 200	....		0	12	6	3	2	6
200	"	300	0	15	0	3	15	0
300	"	400	0	17	6	4	7	6
400	"	500	1	2	6	5	5	0
500	"	600	1	7	6	6	2	6
600	"	800	1	12	6	7	0	0
800	"	1000	1	17	6	8	2	6
1000 tons and upwards	.....		2	2	6	9	7	6

To or from Kingroad and Sharpness—

			£	s.	d.				£	s.	d.
Under 40 tons	.....		0	15	0	300 tons and under 400			3	10	0
40 tons and under 60			1	1	0	400	"	500	4	2	6
60	"	80	1	11	6	500	"	600	4	15	0
80	"	100	2	0	0	600	"	800	5	7	6
100	"	200	2	10	0	800	"	1000	6	5	0
200	"	300	3	0	0	1000 tons and upwards.			7	5	0

Gloucester and Berkeley Canal, continued.

Pilots taken on board any vessel inward bound to the westward of Ilfracombe, shall be paid the same Pilotage Rates as from Lundy Island; if between the Nash Point and Ilfracombe, the same rates as from the Nash Point; if between the Nash Point and the Holmes, the same rates as from the Nash Point; and if between the Holmes and Kingroad, the same rates as from the Holmes.

Pilots, discharged from any vessel on the outward voyage between any of the stages mentioned in the above scale of rates, shall be paid the same Pilotage Rates as if they had been taken to the next stage beyond the place where they were discharged.

All Vessels piloted to Chepstow or to Lydney shall pay the same Pilotage Rates as to Sharpness, and vice versa, with the exception of Coal laden vessels coastwise to and from Lydney, under 200 tons register, for which a special scale of charges, at a reduced rate, is provided by the 4th Pilotage Bye Law.

Vessels piloted from Sharpness to Lydney, or from Lydney to Sharpness, and then to Kingroad, shall pay the same rates as between Sharpness and Kingroad.

Vessels piloted to and from any place in the River Severn above Sharpness shall pay one-fourth more than the rates between Sharpness and Kingroad.

All light vessels between Kingroad and Sharpness, or any intermediate point, shall be entitled to one-fifth reduction on the full pilotage charges for that portion of the district: and all vessels propelled or towed wholly by steam power, between Kingroad and Sharpness, or any intermediate point, shall be entitled to a further reduction of one-fourth of the full pilotage charges for that portion of the district.

Vessels taking a Pilot from Kingroad to any place on the River Severn must employ assistants to the Pilot, whose number and payment are regulated by the 6th Pilotage Bye Law.

Vessels retaining a Pilot on board after he has discharged the duties for which he has engaged, or whilst waiting for water up the River Severn, or whilst delayed by contrary winds when outward bound, and vessels in charge of a Pilot compelled to bear up and return from the westward from stress of weather or accident, must compensate him according to the regulations contained in the 7th, 8th, and 9th Pilotage Bye Laws.

In addition to the foregoing charges, a Collector's Fee, varying according to the size of the vessel, from 6d. to 2s. 6d. is payable under the 10th Pilotage Bye Law.

HAVERFORDWEST.

Keelage and Wharfage.—One penny per ton registered tonnage.

ILFRACOMBE.**Keelage.**

For every ship or vessel driven in by stress of weather, &c.

Coasters belonging to the port 0s. 6d.

„ not belonging to the port .. 1s. 6d.

Vessels going to or coming from any of Her Majesty's Plantations in Asia, Africa, or America, 2s. 6d.

Also, for every vessel paying keelage, the additional sum of 6d. for each Top borne by such vessel.

Lighthouse.

For every vessel belonging to the port 0s. 6d.

For every vessel not belonging to the port 1s. 0d.

The Light is kept up from the 1st day of September to the last day of March in every year

Mooring Chains and Buoys.

Smacks, 1s.

Two-mast vessels, 2s.

Harbour Dues.

Coasting Smacks, 3s. 6d. Schooners, 4s. 6d. Brigs, 5s. 6d.

Foreign going, 1s. extra.

When the Light is out, 6d. each less for vessels belonging to the Harbour, and 1s. each less for vessels not belonging to the Harbour.

LLANELLY.**Pilotage.**

LIMIT No. 1.—If a Pilot be taken on board as far to the westward as to bring Rhossilly Church open to the westward of the Holmes, he is to be paid for every foot of water the vessel may draw.

LIMIT No. 2.—If taken on board within No. 1. but to the westward of No. 4 buoy for Pembrey, or No. 6 for Llanelly.

	Limit No. 1.		Limit No. 2.		Outwards.	
	s.	d.	s.	d.	s.	d.
Under 50 tons register ..	1	6	0	9	0	9
From 50 to 75 ..	1	9	1	0	1	0
75 to 100 „ ..	2	0	1	3	1	3
100 to 125 „ ..	2	3	1	6	1	6
125 to 150 „ ..	2	6	1	9	1	9
150 to 175 „ ..	2	9	2	0	2	0
175 to 200 „ ..	3	0	2	3	2	3
200 to 225 „ ..	3	3	2	6	2	6

and 3d. per foot for every additional 25 tons register.

Pilots taken on board inside buoy No. 6, when bound for Llanelly, or inside No. 4, when bound for Pembrey, to be paid 2s. 6d. each for a hobble.

Llanelly, continued.

If any vessel shall evade being boarded by a Pilot in Limit No. 1, she shall pay for Limit No. 1, although boarded above that limit, beside the penalty for refusing a Pilot.

Every vessel paying 2s. per foot and upwards, shall be taken by the Pilot clear of the Holmes, if required.

Each vessel to pay 1s. for the boat.

That when any vessel not exceeding 125 tons register shall have the assistance of a steam-tug in taking her out to sea, a reduction of ten per cent. shall be made on her outward Pilotage.

That all vessels proceeding above Llanelly shall pay as follows, in addition to the rates inwards and outwards from Llanelly:—

	To or from Penclawdd			To or from Spitty			Penclawdd to Spitty	
	s.	d.		s.	d.		s.	d.
Under 50 tons register..	2	6	..	4	0	..	2	6
From 50 to 100 „	3	6	..	6	0	..	3	6
100 to 150 „	4	6	..	8	0	..	4	6
150 to 200 „	6	0	..	9	6	..	6	0

and 6d. for every additional 25 tons register.

Harbour Pilotage.

Under 50 tons, 2s.; 50 and under 75, 2s. 6d.; 75 and under 100, 3s.

For removing vessels between

		Llanelly and Pembrey			Pembrey and Burry Port	
		s.	d.		s.	d.
Under 50 tons register	..	3	6	..	3	6
75	..	4	6	..	4	0
100	..	5	6	..	4	6

For every additional 25 tons—Llanelly and Pembrey, 1s.; Pembrey and Burry Port, 6d.

Vessels sailing from the port, and putting back after having discharged their Pilots, to pay half Pilotage in and out.

Three shillings and sixpence to be the rate charged for a Bar hobble.

“Ceres” Pilot Ship.

That a charge of 2s. 6d. per 100 tons register be made upon every vessel taking a Pilot boarded from the “Ceres.”

Ballast Rates.

Every vessel shall pay for every ton discharged, 4½d.

For each man otherwise employed, ½d. per ton.

Buoyage Dues.

For every ship or other vessel entering into the Rivers Burry, Loughor, and Lliedi, or either of them, from and over the Bar of Burry, 1d. per ton register.

*Llanelly, continued.***Dock Dues.**

Llanelly or New Dock..... 2d. per ton register.

Copper Works Dock 1d. "

Carmarthenshire Dock, 1d. per ton register, for vessels entering or using the Dock, and 1d. per ton the first week, and a farthing per ton every week after, if for repairs or lying up.

LYDNEY.**Tonnage Rates.**

	s.	d.		s.	d.
1 to 10 tons burthen ..	1	0	45 to 50 tons burthen..	4	6
11 to 20 "	2	0	51 to 80 "	5	0
21 to 30 "	3	0	81 to 100 "	6	0
31 to 44 "	4	0	101 tons and upwards	7	6

Pilotage.—The same as Gloucester.**MILFORD.****DEFINITION OF LIMITS.**

From Caldy Island along the coast to St. David's Head, and from thence to Cardigan Island, and *vice versa*; and to and from, and into any out of all ports and places within these Limits.

Pilotage Rates.

	Under 14 ft. per foot. £ s. d.			14 ft. & up per foot. £ s. d.		
From a line drawn from St. Ann's Point to Sheep's Island, to any part of the Harbour below a line drawn from Newton Noyse Point to Martin's Haven.....	0	2	6	0	3	6
From a line drawn from St. Ann's Point to Sheep's Island, or from Habberstone Road to any place above a line drawn from Newton Noyse Point to Martin's Haven in addition ..	0	2	0	0	2	6

Vessels inward-bound not boarded until they have passed a line drawn from Rat Island to Watwick Point, are to pay one-fourth less than the foregoing rates, and if not boarded until they have passed a line drawn from Thorne Island to Great Castle Head, they are to pay one-half only of the said rates, and if not boarded until they have passed the Stack Rock, to a line from Newton Noyse Point to Martin's Haven, they are not to be chargeable with any Pilotage unless the masters thereof require Pilotage assistance.

*Milford, continued.***Additional Rates.***For Ships boarded without the entrance of the Harbour.*

	£	s.	d.
From a line drawn from Leuny Point to Skokham Island,			
in addition, per foot	0	2	0
If to the southward of St. Gowan's Head, ditto	0	1	0
Or from Caldy Island eastward, or from the westward of the Grassholm, or three leagues without Leuny Point,			
in addition to the Harbour Pilotage	3	3	0
Six leagues, ditto	4	4	0
Ten leagues, ditto	6	6	0

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first-mentioned ships shall by an order of Her Majesty's most Honorable Privy Council, be privileged to enter the ports of this Kingdom upon paying the same duties of tonnage as are paid by British ships, in which case such ships and vessels not having British registers shall pay the like rates of pilotage only as are payable by ships having British registers. The said surplus rate chargeable on unprivileged Foreign vessels is to be paid to the Collector of this Corporation's Light Duties, at the Custom House, Milford.

Port Charges.

	£	s.	d.
Keelage	0	0	4
Making fast to the rings	0	0	6
Quayage and moorage per ton register	0	0	0½
Foreign vessels, loading or discharging, per ton..	0	0	6
Coasting vessels, loading or discharging, per ton..	0	0	2
Loading ballast, per ton	0	0	2
Deposit for landing ballast on quay	1	0	0
Ballast lying on the quay, per ton	0	0	0½
Use of beach discharging	0	1	0
Use of beach outfitting or repairing, per ton register	0	0	1
Vessels lying alongside the quay for any period not exceeding one month, per ton register	0	0	2
And for every succeeding month	0	10	0

NEATH.**Tonnage Rates.**

For every ship or vessel which shall anchor, load, or unload within the said port, or which shall be made fast to any pier or other work within the same, or any part thereof, the sum of 1½d. per ton of the register tonnage of such ship or vessel.

*Neath, continued.***Rates of Pilotage.**

LIMIT.—From the Outside of Neath Bar into the Port and Harbour of Neath, and *vice versa*.

FIRST STATION.—From outside of Neath Bar to the Layer, and to any distance between the Layer and the southern end of Abbey Estate, and *vice versa*.

Vessels under 40 Tons Register, 7s.; over 40 and under 60, 10s.

With or without Steam.

SECOND STATION.—From outside of Neath Bar to any distance lying between the inner termination of the First Station and the Abbey Pill, and *vice versa*.

Vessels under 40 Tons Register, 8s.; over 40 and under 60, 11s.

With or without Steam.

THIRD STATION.—From outside of Neath Bar to any distance lying between the Abbey Pill and Neath Bridge, and *vice versa*.

Vessels under 40 Tons Register, 9s. 6d.; over 40 and under 60, 13s. 6d.

With or without Steam.

For vessels over 60 tons register, the rates are as follows:—

Draught of Water.	1st Station.			2nd Station.			3rd Station.		
	Without Steam.	With Steam.		Without Steam.	With Steam.		Without Steam.	With Steam.	
	£ s. d.	£ s. d.		£ s. d.	£ s. d.		£ s. d.	£ s. d.	
8 feet ..	0 11 3	0 8 5		0 12 9	0 9 7		0 14 9	0 11 1	
8½ " ..	0 12 0	0 9 0		0 13 6	0 10 2		0 16 0	0 12 0	
9 " ..	0 12 6	0 9 5		0 14 0	0 10 6		0 16 6	0 12 5	
9½ " ..	0 13 0	0 9 9		0 14 6	0 10 11		0 17 0	0 12 9	
10 " ..	0 13 6	0 10 2		0 15 0	0 11 3		0 18 0	0 13 6	
10½ " ..	0 14 0	0 10 6		0 16 0	0 12 0		0 19 0	0 14 3	
11 " ..	0 14 6	0 10 11		0 16 9	0 12 7		1 0 0	0 15 0	
11½ " ..	0 15 9	0 11 10		0 18 3	0 13 8		1 1 6	0 16 2	
12 " ..	0 16 10	0 12 8		0 19 10	0 14 11		1 3 1	0 17 4	
12½ " ..	0 18 6	0 14 2		1 2 0	0 16 6		1 5 3	0 18 11	
13 " ..	1 0 6	0 15 5		1 4 6	0 18 5		1 8 0	1 1 1	
13½ " ..	1 2 6	0 16 11		1 7 0	1 0 3		1 10 6	1 2 11	
14 " ..	1 8 0	1 1 0		1 13 0	1 4 9		1 17 0	1 7 9	
14½ " ..	1 13 6	1 5 2		1 19 6	1 9 8		2 4 6	1 13 5	
15 " ..	2 1 6	1 11 2		2 8 6	1 16 5		2 14 6	2 0 11	
15½ " ..	2 10 6	1 18 0		2 17 9	2 3 4		3 5 3	2 8 11	
16 " ..	3 1 0	2 5 9		3 8 6	2 11 5		3 17 0	2 17 9	
16½ " ..	3 12 0	2 14 0		4 0 6	3 0 5		4 10 6	3 7 11	
17 " ..	4 5 6	3 4 2		4 14 0	3 10 6		5 6 0	3 19 6	
17½ " ..	4 19 0	3 14 3		5 8 0	4 1 0		6 2 0	4 11 6	
18 " ..	5 13 0	4 5 0		6 3 0	4 12 3		6 19 0	5 4 3	
And 10s. for every half foot over 18 feet.			And 7s. extra for every half foot over 18 feet.			And 8s. extra for every half foot over 18 feet.			

For conducting vessels from one station to another station within the Port:—

	s.	d.
Vessels under 100 tons	3	0
" over 100 tons and under 150..	4	0
" " 150 " " 200..	5	0
" " 250 " " ..	8	0

Neath, continued

To or from the Mumbles:—	s.	d.
Vessels under 250 tons	4	0 extra.
„ over 250 „	7	0 „

Pilot Boats and Hobblers' Fees, 5s., which is included in the rates.

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first mentioned ships shall, by any order of Her Majesty's most Honorable Privy Council, be privileged to enter the ports of this kingdom, upon paying the same duties of tonnage as are paid by British ships, in which case such ships and vessels not having British registers shall pay the like rates of pilotage only as are payable by ships having British registers.

Pilot leading the way (if required by the master of the vessel following), entitled to half-pilotage as far as he shall lead.

Rates to Hobblers.

	s.	d.
Hobbler over the Bar, to or from the Layer or Giant's Grave, or the southern end of the Abbey Estate..	2	6 per vessel
Hobbler over the Bar, to or from Fox's Coal Bank, or the Copper Works, or the Abbey Pill..	3	0 „
Hobbler over the Bar, to or from Melincrythan Wharf or Neath Bridge	4	0 „
Hobbler employed in removing or assisting vessels within the Harbour	1	6 per tide

Towage Rates and Regulations.**INWARDS.**

	Per ton register.	s.	d.
From the Outer Buoy to Layer or Giant's Grave ..	0	1½	
„ „ Abbey Coal or Crown Copper Works ..	0	1½	
„ „ Mines Royal Copper Works ..	0	2	
„ „ Neath	0	2½	

OUTWARDS.

From Giant's Grave or the Layer to Sea or Outward Buoy	0	2
„ Abbey Coal or Crown Copper Works to Sea or Outward Buoy	0	2½
„ Abbey Pill or Mines Royal Copper Works to Sea or Outward Buoy	0	2½
„ Neath to Sea or Outward Buoy	0	2½

Vessels that may require to be towed shorter distances, if not having been offered the steamer to tow them the whole distance from where they are laden or going to load, to pay as under:—

From the Layer to Giant's Grave, and <i>vice versa</i> ..	0	0½
„ Abbey Coal or Crown Copper Works ..	0	1
„ Abbey Pill or Mines Royal Copper Works ..	0	1½
„ Neath	0	1½

Neath, continued.

	s.	d.
From Giant's Grave to Abbey Coal or Crown Copper Works	0	0½
„ Abbey Pill or Mines Royal Copper Works	0	1
„ Neath	0	1½
From Abbey Coal or Crown Copper Works to the Pill ..	0	0½
„ „ „ Neath ..	0	1
Light vessels towed from Swansea or Port Talbot to Giant's Grave	0	2
Light vessels towed from Neath Harbour to Swansea or Port Talbot	0	6
Loaded vessels towed to Swansea or Port Talbot (in addition to the rate of towage from the various Stations to the Outward Buoy)	0	3
Vessels from 150 tons register and upwards, for towage in or out, to or from Giant's Grave.. ..	0	2
All vessels not exceeding thirty tons register to pay 3s. 6d. for towage in or out, to or from Giant's Grave.		
Three shillings the lowest rate for any towage.		

NEWPORT.

Tonnage Rates.

Coastwise, ½d. per ton register. Foreign, ¼d. per ton register.

Keelage.

One penny per ton taken on discharged, at the Wharves in the River.

Tonnage Rates—Docks.

	s.	d.
INWARDS. —For every ship or other vessel which shall enter the said dock from any part of Great Britain, Ireland, the Isle of Man, or any part of the Islands of Guernsey, Jersey, Alderney, and Sark, per ton measurement	0	2
For every other part of Europe, except places within the Straits of Gibraltar and round the North Cape, per ton measurement	0	5
From any port or place in Europe round the North Cape, or any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa, per ton measurement	0	7
From any port or place in British America, any port or place in the United States of America, or any port or place in any other part of the world, per ton measurement	0	10
For every ship or other vessel, with a cargo, which shall enter the said dock, and depart therefrom, within three weeks from the day of entry, without breaking bulk, or which shall discharge, and afterwards take on board, and depart with the same cargo, within such period of three weeks, per ton measurement (exclusive of the dues under the name of rent hereinafter mentioned)	0	6

Newport, continued.

	s.	d.
For every ship or other vessel which shall have departed from the said dock with a cargo, or any part of such cargo laden therein, and shall re-enter the said dock, with the same cargo, or part of such cargo, per ton measurement, (exclusive of the dues under the name of rent hereinafter mentioned) ..	0	3
OUTWARDS.—For every ship or other vessel which shall depart from the said dock to any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney, and Sark, per ton measurement	0	2
To any other part of Europe, except places within the Straits of Gibraltar and round the North Cape, per ton measurement ..	0	5
To any port or place in Europe, round the North Cape, or any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa, per ton measurement	0	7
To any port or place in British America, any port or place in the United States of America, or any port or place in any other part of the world, per ton measurement	0	10
For every ship or other vessel which shall enter the said dock in ballast, or light, and depart therefrom in ballast, or light, per ton measurement (exclusive of the dues under the name of rent hereinafter mentioned)	0	3

Police and Watchmen.

For all vessels entering or departing from the dock, at per week, or fractional part of a week	1	0
N.B.—Competent watchmen for the protection of vessels and property therein can be obtained on application at the dock-office, the charge for each watchman is per night	3	6

Rent Charges.

All ships and vessels entering the dock in ballast and departing with cargoes not exceeding 400 tons register measurement, to be allowed to remain at the rates before specified for a period of	2 weeks
Above 400 tons and not exceeding 700 tons register measurement	3 ..
Above 700 tons register measurement	4 ..
Vessels above 70 tons and not exceeding 700 tons register measurement entering with a cargo and going out with another	4 ..
Vessels above 700 tons register measurement entering with a cargo and going out with another	5 ..
Vessels above 70 tons register measurement entering with a cargo and going out without breaking bulk, or which shall discharge, and afterwards take on board and depart with the same cargo	3 ..

Newport, continued.

Vessels under 70 tons register measurement, entering the dock without ballast 4 day

All ships and vessels which shall remain in the dock for any longer periods than those respectively above stated, shall be subject (in addition to the rates and dues before stated) to a rent charge of, for the first week, or any portion of a week, per ton register measurement.. .. . 0

For the second week or any portion of a week, per ton register measurement 0

For the third week or any portion of a week, per ton register measurement 0

For the fourth week and every subsequent week and for any portion of a week, per ton register measurement 0

N.B.—In estimating the dues contained in the foregoing schedule, every vessel of less than 20 tons register measurement shall be rated at 20 tons register measurement.

Use of Machinery for Shipping or Unshipping.

For every ton of coal 0 1

For every ton of coke, culm, iron, cinders, iron ore, earth or rubbish of any kind.. .. . 0 2

For every ton of metallic (not iron) ore.. .. . 0 3

Whenever waggons containing any of the above articles are moved on the railway sidings by hydraulic power in connection with the shipping machines, a charge will be made at the rate per ton of 0 1

All articles, matters or things not included in the above-mentioned, and excepting ballast, will be subject to special agreement and charges.

Persons (other than the crews of vessels on the dock), landing or embarking on the Dock Company's premises, will be subject to a charge per head of 0 1

Charges for Discharging and Removing Ballast.

For every ton of ballast that is in the hold within 15 feet abaft, and 15 feet before any hatchway 1 0

For every ton of ballast exceeding in the hold a greater distance than stated above, an additional sum of 0 2

An additional charge for working by night will be made at the rate of per ton 0 3

Rates of Pilotage.

The Limit of this Pilotage is that portion of the Bristol Channel which lies eastward of Lundy Island, up to, and includes Kingroad and the River Usk as far as the Caerleon Bridge. This Pilotage is not compulsory, but may be obtained over all or any portion of this district, at the discretion of the masters of vessels.

Newport, continued.

Every licensed Pilot employed in piloting vessels to or from the port of Newport shall be paid the following Pilotage Rates, according to the registered tonnage of the vessel.

FOR LADEN VESSELS.

		Newport to Mouth of River Usk.			Newport to the Holmes or Cardiff Roads.		
		£	s.	d.	£	s.	d.
If under 100 tons.....		0	10	0	..	0	18 0
100 tons and under 200		0	15	0	..	1	0 0
200 " 300		0	17	6	..	1	10 0
300 " 400		1	2	6	..	1	15 0
400 " 500		1	5	0	..	2	1 0
500 " 600		1	6	0	..	2	3 0
600 " 800		1	8	0	..	2	8 0
800 " 1000		1	10	0	..	2	12 0
1000 tons and upwards		1	12	0	..	2	16 0

For all vessels actually engaged in the coasting trade of the United Kingdom, and vessels in ballast, the charges to be one-third less than the above.

FOR LADEN AND UNLADEN VESSELS.

		Limit No. 1.			Limit No. 2.			Limit No. 3.		
		£	s.	d.	£	s.	d.	£	s.	d.
If under 100 tons		0	7	6	0	17	6	1	5	0
100 tons and under 200		0	10	0	1	5	0	1	12	6
200 " 300		0	15	0	1	15	0	2	10	0
300 " 400		0	17	6	1	17	6	2	17	6
400 " 500		1	0	0	2	2	6	3	5	0
500 " 600		1	2	6	2	7	6	3	15	0
600 " 800		1	5	0	2	15	0	4	5	0
800 " 1000		1	10	0	3	5	0	5	5	0
1000 tons and upwards...		1	15	0	3	15	0	6	0	0

LIMIT No. 1.—Between the Holmes or Cardiff Roads and Minehead or Kingroad, or any Point east of Minehead and west of Kingroad.

LIMIT No. 2.—Between the Holmes or Cardiff Roads and Coombe, or any Point west of Minehead or Nash Point, and east of Coombe.

LIMIT No. 3.—Between the Holmes or Cardiff Roads and Lundy Island, or any Point west of Coombe.

Any Pilot who may be required to remain on board any ship or vessel for the convenience of the captain, owner, or agent, after he shall have discharged the duties for which he was engaged, shall be entitled to be paid ten shillings per day for every day he may be employed; and any Pilot who may be required to move any ship or vessel in the dock, harbour, or river, occupying only one tide, shall be entitled to be paid for every ship

Newport, continued.

	s.	d.
Under 100 tons	4	0
100 and under 300	5	0
300 „ 500	7	6
500 „ 800	10	0
800 and upwards	12	6

Vessels wind bound in the waters of the Newport District, and retaining the services of a Pilot, shall pay five shillings per diem.

Pilots taken on board of any vessel inward bound to the westward of Ilfracombe, shall be paid the same Pilotage rates as from Lundy Island; but if west of Nash Point or Minehead and east of Ilfracombe the same rates as from the Nash Point; if between the Nash Point and the Holmes, the same rates as from the Nash Point; and if between the Holmes and Kingroad, the same rates as from the Holmes.

In case any vessel shall be compelled to bear up and return from the westward from stress of weather or accident, the Pilot in charge shall be entitled to, and shall be paid one-third of the Pilotage charge in addition, according to the distance such ship or vessel may have reached before she shall have put back.

Every master, owner, or agent of any vessel employing a Pilot, shall, in addition to the foregoing charges, pay a clerk or collector's fee, as follows, viz. :—

	s.	d.
Vessels under 100 tons	0	6
100 and under 300	1	0
300 „ 500	1	6
500 „ 800	2	0
800 and upwards	2	6

PEMBREY.**Ballast Rates.**

Wheeling 1d. per ton register.

Every man employed on board to be paid at the rate of three shillings per day.

Each vessel to pay extra for the use of the planks, barrows, and waggons, viz. :—

	s.	d.
Not exceeding 50 tons register	1	0
„ 100 „	1	6
„ 150 „	2	0
„ 200 „	2	6
„ 300 „	3	0
„ 350 „	3	6
„ 400 „	4	0
Exceeding 400 „	4	6

The same charge extra for the use of the crane and tubs if required.

*Pembrey, continued.***Harbour Dues.**

	s.	d.
For every ship, barge, boat, or other vessel, coming in or going out of the harbour, to load or unload, per ton	0	2
For every ship, barge, boat, or other vessel, running into the harbour by stress of weather, and not unloading	0	1
And for every such ship, barge, boat, or other vessel running into the harbour by stress of weather, for shelter, and lying longer than 7 days, the further sum per ton per day of ..	0	0½
For every ship, barge, boat, or other vessel, coming into the harbour to seek a freight of whatever tonnage, the sum of ..	1	0

Stemming.

	s.	d.
Vessels not exceeding 20 tons register	0	6
" 50 " 	1	0
" 75 " 	1	6
" 100 " 	2	0
Exceeding 100 " 	2	6

PENNARD.

Keelage, 4d. per ton register.

PORTHCAWL.**Tonnage Rates.**

Coastwise, 2d. per ton register. Foreign, 4d. per ton register.

Ballast.

Not exceeding 15 tons 6d. per ton register.

Exceeding 15 tons 4d.

Any ship arriving in tow of a steamer, after having discharged her last cargo at a neighbouring port, shall pay 1s. per ton for discharging her ballast, if not exceeding 15 tons; if exceeding 15 tons, 4d. per ton register tonnage.

Pilotage.

From any place between Sker or Nash Points, and inside the sands into the harbour, and out of the harbour, to every such place:—

	£	s.	d.
Per registry under 30 tons	0	4	0
30 and under 40 " 	0	5	0
40 " 50 " 	0	6	6
50 " 60 " 	0	8	0
60 " 75 " 	0	10	0
75 " 100 " 	0	12	0
100 " 125 " 	0	15	0
125 " 150 " 	0	18	0
150 " 175 " 	1	2	0
175 " 200 " 	1	6	0
200 " 225 " 	1	10	0
225 tons and upwards	1	14	0

Porthcawl, continued

And for the use of the pilot boat, every ship using the same :—

	s.	d.
Per registry under 75 tons	1	0
75 tons and upwards.....	2	0

For transporting a ship in the harbour, and re-mooring her, or for mooring and unmooring a ship, 1s. 6d. for each pilot, and 9d. for each hobbler.

And if any master of a ship shall engage a pilot and hands to take his ship out of the harbour, and she is not ready to be taken out during that tide, or if after having been moved for the purpose of being taken out she does not proceed, 1s. 6d. for each pilot, and 9d. for each hobbler or assistant.

PORT TALBOT.**Tonnage Rates.**

For every vessel laden 3d. per ton register.

For every vessel in ballast 2d. „

Pilotage.

	From Outer Buoy to destination, if in 1 tide of 3 hrs.			To Outer Buoy from berths, if in 1 tide of 3 hrs.		
	£	s.	d.	£	s.	d.
Above 25 tons register and under 40 ..	0	5	0	0	4	0
40 ..	0	6	0	0	5	0
50 ..	0	7	0	0	6	0
60 ..	0	8	0	0	6	10
70 ..	0	9	0	0	7	8
80 ..	0	10	0	0	8	6
90 ..	0	12	0	0	9	10
100 ..	0	14	0	0	11	6
120 ..	0	16	0	0	13	2
140 ..	0	18	0	0	14	10
160 ..	1	0	0	0	16	6
180 ..	1	5	0	1	0	0
200 ..	1	10	0	1	3	6
250 ..	2	0	0	1	10	4
300 ..	2	15	0	2	0	8
350 ..	3	10	0	2	11	4
and for every additional 50 tons	0	5	0	0	4	0

If inside the outer buoy only one-half of the foregoing rates.

For transporting a vessel from one part of the harbour to another—under 100 tons, 2s. 6d.; above 100 tons, 5s.

The price paid to hobbler not to exceed 2s. for each hobble; and no hobbler shall charge two hobbles, unless occupied for more than three successive hours.

Port Talbot, continued.

For every hobbler engaged by the master, 1s. 6d. from sea into the dock, and 2s. from sea to the wharf of her destination; if required to tow, 6d. additional to each hobbler; if engaged only to the end of the breakwater, half the above rates only to be charged.

Steam Tugs.*To or from the outer Buoy.*

Register Tonnage.	£	s.	d.	Register Tonnage.	£	s.	d.
20 tons and under ..	0	3	0	100 and under 120 ..	0	17	0
20 and under 30 ..	0	4	0	120 ..	1	1	0
30 ..	0	5	0	150 ..	1	5	0
40 ..	0	6	0	200 ..	1	10	0
50 ..	0	8	0	250 ..	2	0	0
60 ..	0	9	0	300 ..	2	10	0
70 ..	0	10	6	400 ..	3	10	0
80 ..	0	13	0	500 ..	4	10	0
90 ..	0	15	0	every additional 50 tons	0	5	0

Stemming Fee, 1s.

For use of Harbour Company's tow rope:—

	s.	d.
Vessels under 50 tons register burthen	1	0
„ of 50 tons and under 100	3	0
„ 100 .. 200	3	0
„ 200 .. 300	4	0
„ 300 tons and upwards	5	0

Ballast.

Ballast in the river is free of charge; in the dock 3d. per ton.

For use of planks and barrows for 10 tons and under, 2s.; 10 tons and under 20, 3s. 6d.; and 1s. extra for every 10 tons additional.

For use of the graving bank:—on the hard, 1d. per ton register per week; on the blocks, 1½d. per ton register per week.

SAUNDERSFOOT.

Pilotage.—For every 100 tons in and out, 10s.

Harbour Dues.—2d. per ton register.

Pier Light and Signal.

Each Vessel.	s.	d.	Each Vessel.	s.	d.
20 to 30 tons register	0	3	70 to 100 tons register ..	1	0
30 to 50 ..	0	6	100 to 150 ..	1	6
50 to 70 ..	0	9	150 tons and upwards ..	2	0

Discharging Ballast.

For each man employed on board.... 1d. per ton register

For wheeling 1d. „

Trimming.—2d. per ton.

SWANSEA.**Tonnage Rates.**

		s.	d.
For every vessel bound from and to any port or place in the United Kingdom, or the Isle of Man, under 150 tons			
	per ton	0	4
150 tons and under 250 tons	per ton	0	5½
250 tons and under 350 tons	per ton	0	7
350 tons and upwards	per ton	0	8½

For every vessel bound to or from any port or place in Europe, or any port or place within the Straits of Gibraltar, under 100 tons			
	per ton	0	4
100 tons and under 250 tons	per ton	0	6
250 tons and under 350 tons	per ton	0	7½
350 tons and upwards	per ton	0	9

For every vessel bound to or from any other port or place than above specified, under 150 tons			
	per ton	0	7½
150 tons and under 250 tons	per ton	0	9½
250 tons and under 350 tons	per ton	1	0
350 tons and upwards	per ton	1	3

And in respect of Vessels entering in Ballast, and departing with Cargoes, the following Rates.

		s.	d.
Vessels bound to ports in the United Kingdom, or the Isle of Man	per ton	0	3

Vessels bound to any port in Europe, or within the Straits of Gibraltar, under 100 tons.....			
	per ton	0	3
100 tons and under 250 tons	per ton	0	5
250 tons and under 350 tons	per ton	0	6
350 tons and upwards	per ton	0	7

Vessels bound to any other ports, under 150 tons ..			
	per ton	0	6
150 tons and under 250 tons	per ton	0	7
250 tons and under 350 tons	per ton	0	9
350 tons and upwards.....	per ton	0	11

Vessels driven in by stress of weather, and remaining over four tides, half the above rates. Vessels remaining over thirty days, unless prevented by embargo or weather, 1d. per ton per week.

Cranage.*At Corporation Cranes, Public Quay.*

		s.	d.
For every lift under 1 ton		0	3 per lift
Not exceeding 2 tons		0	3 per ton
2 to 5 tons		0	6 „
Five tons and upwards		2	0 „

*Swansea, continued.***Ballast Rates.**

Register Tonnage.	Rates per ton on the quantity discharged.				
	s.	d.		s.	d.
Under 100 tons	0	5	at New Cut ..	0	6
100 and under 150 tons	0	7	„ ..	0	8
150 and under 200 tons	0	9	„ ..	0	10
200 tons and upwards..	0	11	„ ..	1	0

Additional Charges.

	s.	d.
Discharged from any vessel into another vessel	0	9
Discharged into Lighters	1	6
Loaded into any vessel	0	6
Loaded into any vessel, and discharged therefrom	1	6

Charges for use of five and ten ton Cranes,*Belonging to the Harbour Trustees.*

	£	s.	d.		£	s.	d.
Under 1 ton ..	0	0	3	per lift	5 and under 6..	0	7
1 and under 2..	0	0	6	„	6 „ 7..	0	10
2 „ 3..	0	1	6	„	7 „ 8..	0	12
3 „ 4..	0	3	0	„	8 „ 9..	0	15
4 „ 5..	0	4	6	„	9 „ 10..	1	0

No lift to exceed ten tons.

Towage.*In or Out, exclusive of Harbour Towsages.*

	£	s.	d.		£	s.	d.
Under 50 tons	0	7	6	425 and under	450	3	15
50 and under	75	0	10	450 „	475	4	0
75 „	100	0	12	475 „	500	4	5
100 „	125	0	15	500 „	525	4	10
125 „	150	0	17	525 „	550	4	15
150 „	175	1	0	550 „	575	5	0
175 „	200	1	5	575 „	600	5	5
200 „	225	1	10	600 „	650	5	10
225 „	250	1	15	650 „	700	5	15
250 „	275	2	0	700 „	750	6	0
275 „	300	2	5	750 „	800	6	5
300 „	325	2	10	800 „	850	6	10
325 „	350	2	15	850 „	900	6	15
350 „	375	3	0	900 „	950	7	0
375 „	400	3	5	950 „	1000	7	7
400 „	425	3	10				

All vessels above 1000 tons, 2d. per ton, new measurement.

If more than one Tug is required, half the above rates will be charged for each additional Tug.

Swansea, continued.

Register Tonnage			Pilotage.			
			Inwards	Outwards	Total	
			£ s. d.	£ s. d.	£ s. d.	
Vessels	50 tons and under	75	0 10 0	0 6 0	0 16 0	
Vessels	75 tons and under	100	0 11 0	0 7 0	0 18 0	
Vessels	100 tons and under	125	0 12 0	0 8 0	1 0 0	
Vessels	125 tons and under	150	0 14 0	0 8 0	1 2 0	
Vessels	150 tons and under	175	0 17 0	0 8 0	1 5 0	
Vessels	175 tons and under	200	0 19 0	0 8 0	1 7 0	
Vessels	200 tons and under	250	1 6 0	0 10 0	1 16 0	
Vessels	250 tons and under	300	1 12 0	0 12 0	2 4 0	
Vessels	300 tons and under	350	2 3 0	0 14 6	2 17 6	
Vessels	350 tons and under	400	2 10 0	0 17 0	3 7 0	
Vessels	400 tons and under	450	2 17 6	1 2 0	3 19 6	
Vessels	450 tons and under	500	3 5 0	1 7 0	4 12 0	
Vessels	500 tons and under	550	3 10 0	1 12 0	5 2 2	
Vessels	550 tons and under	600	3 15 0	1 17 0	5 12 0	
Vessels	600 tons and under	650	4 0 0	2 2 0	6 2 0	
Vessels	650 tons and under	700	4 5 0	2 7 0	6 12 0	
Vessels	700 tons and under	750	4 10 0	2 12 0	7 2 0	
Vessels	750 tons and under	800	4 15 0	2 17 0	7 12 0	
Vessels	800 tons and under	850	5 0 0	3 2 0	8 2 0	
Vessels	850 tons and under	900	5 5 0	3 7 0	8 12 0	
Vessels	900 tons and under	950	5 10 0	3 12 0	9 2 0	
Vessels	950 tons and under	1000	5 15 0	3 17 0	9 12 0	

together with an additional sum of 5s. in respect of every 50 tons above 950 tons, on the Inward Pilotage; and an additional sum of 5s. in respect of every 50 tons above 950 tons, on the Outward Pilotage.

N.B.—Pilotage not compulsory upon vessels under 100 tons register, entering or leaving Swansea Harbour in ballast.

Pilots will take vessels over 500 tons register, Outward Bound, clear of the Green Grounds, on to the Mumbles Roads; and the above charge includes landing the Pilot in all cases.

One half the above rates only to be paid and payable to every Pilot navigating or assisting any vessel (not entering Swansea Harbour), within any part of Swansea Bay, or within the limits of the Pilotage Ground hereinafter mentioned.

Vessels of 200 tons and upwards, if boarded beyond the following bearings, shall pay additional Pilotage, as under:—

			Westward of Oxwich Point, bearing N.N.E. South of Sker Buoy, bearing E.N.E. or W.S.W.		West of Worm's Head bearing N.N.E.	
			s. d.		£ s. d.	
Vessels	200 tons and under	300	....	5 0	....	0 6 0
Vessels	300 tons and under	400	....	7 6	....	0 10 0
Vessels	400 tons and under	500	....	10 0	....	0 15 0
Vessels	500 tons and under	600	....	12 6	....	1 0 0

Swansea, continued.

	s.	d.	£	s.	d.
Vessels 600 tons and under 700	15	0	1	5	0
Vessels 700 tons and upwards	18	6	1	10	0

OPTIONAL PILOTAGE.—Masters of vessels under 500 tons register requiring Pilots to take their vessels to the Mumbles Roads, or clear of the Green Grounds, to pay, in addition to the Outward Pilotage Rates, the following additional rates, including landing:—

	s.	d.
Vessels under 100 tons	4	0
Vessels 100 tons and under 200	5	6
Vessels 200 tons and under 300	7	6
Vessels 300 tons and under 400	9	6
Vessels 400 tons and under 500	11	0

Masters of vessels requiring Pilots to take their vessels to the Eastern or Western Limits, to pay in addition to the Outward Rates, the following additional rates, including landing:—

	£	s.	d.
Vessels 300 tons and under 500	3	0	0
Vessels 500 tons and under 700	4	0	0
Vessels 700 tons and under 900	5	0	0
Vessels 900 tons and upwards	6	0	0

The following shall be deemed to be the limits of the Pilotage Ground of Pilots appointed and licensed by the Swansea Harbour Trustees, viz.:—"North of the line of the Nash Lights in one;" and "east of an imaginary line running north and south of a point, four miles westward of the Helwick Light Vessel, placed off the Helwick Shoal, near the Worm's Head, in the County of Glamorgan."

Every Pilot required to remain on board a vessel, whether inward or outward bound, to be paid by the Master of such vessel, at the rate of 4s. for every twelve hours, or broken portion of twelve hours, in which such Pilot shall not have earned pilotage or distance-money, in the same vessel.

Harbour Pilotage.

	s.	d.
Vessels under 100 tons	2	6
Vessels 100 tons and under 200	3	6
Vessels 200 tons and under 400	5	0
Vessels 400 tons and under 500	7	6
Vessels 500 tons and upwards	12	0

If the master of any vessel shall require any Pilot to go on board and take his vessel out of the Harbour, transport or move her, and such vessel be not ready to be taken out or moved, half the rates last mentioned shall be paid to the Pilot.

Masters of vessels requiring Hobblers or Boats, to assist in removing vessels within the Harbour, shall pay each Hobbler employed, 2s., and for each Boat, 2s. 6d.

TENBY.**Tonnage Rates.**

Vessels discharging	3d. per ton register
Vessels wind bound	1½d. „
Yachts	2d. „ or 6d. per ton yearly
Trawlers	2d. „ or 40s. yearly
Pilot Boats exempt.	

WATCHET.

Harbour Dues.—One halfpenny per ton registered tonnage.

VALUE IN BRITISH CURRENCY

OF

THE MONEYS OF ALL NATIONS.**AMERICA, U.S.**

	£	s.	d.
Eagle	2	1	0
Half Eagle	1	0	6
Dollar	0	4	2

AUSTRIA.

Ducat.....	0	9	4
Silver Florin.....	0	2	0
Dollar.....	0	4	0
Zwanzigr, 20 Kreutzers ...	0	0	8

BELGIUM.

Gold Leopold	0	19	10
— 10 Franc Piece	0	7	10
Silver 5 Franc.....	0	3	11
— 1 Franc.....	0	0	9½

BREMEN.

Louis d'or	0	16	0
Gold Rigabank Dollar	0	3	4
36 Gros Piece	0	1	6

BRAZILS.

Gold Piece, 6400 Reis	1	15	9
4000 —	1	0	0
Silver ditto, 1200 —	0	4	2
960 —	0	4	1
640 —	0	2	9
320 —	0	1	4
200 —	0	0	8

DENMARK.

	£	s.	d.
Christlan d'or	0	16	3
Silver Species	0	4	4
Rigsbank Daler	0	2	2
Mark	0	0	4½

EGYPT.

Gold New Sequin	0	10	4
Silver New Piastre.....	0	3	4
— Grush	0	1	2

EAST INDIES.

Gold Mohur.....	1	9	0
Sicca Rupee.....	0	1	10½

FRANCE.

Gold Napoleon	0	16	0
Silver 5-Franc Piece	0	4	0
— Franc	0	0	9½

GREECE

40-Drachmi Gold Piece ...	1	10	6
Five ditto	0	3	9
1 Drachmi, 100 Leplas	0	0	8½

GERMANY.

Gold Louis d'or	0	16	1
— Ducat	0	9	3
Silver Crown	0	4	4
Florin	0	1	8

HOLLAND.

	£	s.	d.
Gold 10-Florin Piece.....	0	16	6
— Ducat	0	9	3
Silver Florin or Guilder ...	0	1	8

HAMBURG and LUBEC.

Ducat.....	0	9	3
Dollar.....	0	4	4
Mark	0	1	2½

HANOVER, BRUNSWICK, &c.

Gold George d'or Double...	1	12	4
Ditto, Single	0	16	2
Thaler, 30 Groschen	0	2	11

MEXICO.

Gold Doubloon	3	5	0
— Half ditto	1	12	6
— Quarter ditto	0	16	3
— Sixteenth ditto.....	0	4	0
Silver Dollar	0	4	2
— Half ditto	0	2	1
— Quarter ditto	0	1	0½
— Eighth ditto	0	0	6½

NAPLES.

Gold Piece of 30 Ducats ...	5	0	0
Silver Ducat	0	3	4
— Dollar	0	4	0

NORWAY.

Spanish Dollar	0	4	4
Rigsbank Dollar	0	2	2
Mark	0	0	9½

POLAND.

Gold Ducat	0	9	0
Rix Dollar	0	4	0
Florin.....	0	0	5½

PORTUGAL.

Gold Joanoze, 100 Reis.....	1	16	0
Silver Crown, 1000 Reis ...	0	4	8
— Crusado 400 Reis ...	0	2	3

PRUSSIA.

	£	s.	d.
Gold Frederick	0	16	9
Silver Thaler	0	3	0
Silbergroschen	0	0	1½

ROME.

Gold 10-Scudi Piece	2	2	6
Silver Scudo, 10 Paoli	0	4	2
Paoli, 10 Bajocchi	0	0	5

RUSSIA.

Gold Half Imperial	0	16	3
Ducat.....	0	9	2
Silver Rouble	0	3	2

SAXONY.

August d'or	0	16	2
Thaler Specie	0	3	11
— Currency	0	3	0

SPAIN.

Gold Doubloon.....	3	6	6
— Pistole	0	16	6
Silver Dollar.....	0	4	3

SWEDEN.

Gold Ducat	0	9	2
Silver Species	0	4	4
— Half Species.....	0	2	2
Rix Dollar Banco, 48 Sk....	0	1	8

SWITZERLAND.

Gold Double Pistole	1	17	0
Four-Franc Piece	0	4	8
1-Franc do., 10 Batzen.....	0	1	1½

TURKEY.

Gold New Double Sequin...	1	16	0
— Sequin	0	18	0
Spanish Dollar.....	0	4	2
Piastre, 40 Paras.....	0	0	2½

TIDAL CONSTANTS.

By the following Table, the time of High Water may be found in *Local Mean Time*, for any day of the year, by *adding to or subtracting from* the various Ports of reference.

GREAT BRITAIN.

West Coast, &c.				East Coast, &c.			
		H. M.				H. M.	
St. Ives	sub.	1 48	From Milford Haven.	Inverness	sub.	1 49	To or from London.
Newquay	sub.	1 28		Aberdeen	sub.	1 7	
Padstow	sub.	1 19		Dundee	add	0 25	
Boscastle	sub.	1 17		Perth	add	1 28	
Budehaven	sub.	0 58		Leith	add	0 10	
Lundy Island ..	sub.	1 17		Berwick	add	0 11	
Barnstaple Bridge	add	0 41		Blyth	add	1 8	
Appledore	add	0 11		Tynemouth Bar..	add	1 13	
Bideford	add	0 20		North Shields ..	add	1 16	
Minehead	sub.	1 12		Newcastle	add	2 16	
Bridgwater Bar ..	sub.	0 52	To Barnstaple or from Bridgwater.	Sunderland	add	1 15	To or from London.
Weston-super-Mare	sub.	0 48		Seaham	add	1 17	
Flatholm Island ..	sub.	0 48		Hartlepool	add	1 21	
Portishead	sub.	0 15		Whitby	add	1 38	
Kingroad	sub.	0 35		Scarborough	add	2 4	
Chepstow	sub.	0 1		Flamborough head	add	2 23	
Carmarthen Bar ..	sub.	0 22		Great Grimsby ..	add	3 29	
Tenby	sub.	0 32		Hull	add	4 19	
St. Ann's lighthouse	sub.	0 36		Goole	add	5 37	
Fishguard	add	0 24	To or from Milford Haven.	Lynn	add	3 53	
Cardigan	add	0 29		Yarmouth Road ..	sub.	4 52	
Newquay	add	0 58		Lowestoft	sub.	4 10	
Aberystwith	add	0 59		Orfordness	sub.	2 52	
Aberdovey	add	1 28		Margate	sub.	2 27	
Port Madoc	add	0 58		Nore	sub.	1 37	
Caernarvon	sub.	2 2		Chatham	sub.	1 5	
Holyhead	sub.	1 24		Gravesend	sub.	0 57	
Amlwch	sub.	1 5		Woolwich	sub.	0 30	
Beaumaris	sub.	1 3	To or from Liverpool.	London Docks ..	sub.	0 10	
Chester	sub.	1 5					
Fleetwood	sub.	0 23					
Whitehaven	sub.	0 21					
Douglas, I. of Man	sub.	0 23					
Ramsey	sub.	0 23					
Peel	sub.	0 27					
Kircudbright	sub.	0 25					
Ardrossan	add	0 10					
Glasgow	add	1 50					

South Coast.

		H. M.	
Ramsgate	add	5 12	To Milford Haven.
Deal	add	4 43	
Folkstone	add	4 35	
Hastings	add	4 21	
Beachy Head	add	4 48	
Shoreham	add	5 2	

Tidal Constants, continued.

	H.	M.	
Arundel Bar ..	add	5 3	To or from Milford Haven.
Littlehampton ..	add	5 4	
Chichester ..	add	4 58	
Bembridge Point	add	4 28	
Portsmouth ..	add	5 9	
Southampton ..	add	3 58	
West Cowes ..	add	4 13	
Yarmouth ..	add	3 28	
Needles Point ..	add	3 14	
Christchurch ..	add	2 28	
Poole ..	add	2 38	
Portland ..	add	0 29	
Bridport ..	sub.	0 27	

	H.	M.	
Lyme Regis ..	sub.	0 11	From Milford Haven.
Exmouth ..	sub.	0 11	
Torbay ..	sub.	0 32	
Teignmouth ..	sub.	0 32	
Dartmouth ..	sub.	0 16	
Devonport ..	sub.	0 49	
Plymouth Break.	sub.	0 55	
Fowey ..	sub.	1 18	
Mevagizey ..	sub.	1 28	
Falmouth ..	sub.	1 35	
Lizard ..	sub.	1 32	
Penzance ..	sub.	2 2	
Scilly I.(St.Mary)	sub.	2 5	

IRELAND.

Skull ..	sub.	2 30	To or from Milford Haven.
Crookhaven ..	sub.	2 23	
Dunmanus Harb.	sub.	2 35	
Dunbeacon ..	sub.	2 41	
Black Ball harbour	sub.	2 52	
Castletown ..	sub.	2 18	
Bantry Harbour..	sub.	2 45	
West Cove ..	sub.	2 40	
Valentia Harbour	sub.	2 50	
Kilbaba ..	sub.	2 16	
Kilrush ..	sub.	1 50	To or from Milford Haven.
Carrigaholt..	sub.	1 48	
Tarbert ..	sub.	1 35	
Foyne's Island ..	sub.	0 57	
Mellon ..	sub.	0 31	
Limerick ..	sub.	0 16	
Galway ..	sub.	1 57	
Roundstone ..	sub.	2 4	
Achillbeg ..	sub.	1 18	
Broadhaven Harb.	sub.	1 32	
Westport ..	sub.	1 35	
Sligo Bay ..	sub.	1 14	
Donegal Harbour	sub.	1 14	
Killibegs ..	sub.	1 16	
Lough Rossmore	sub.	1 12	
Sheephaven ..	sub.	1 0	
Londonderry ..	add	1 29	
Coleraine ..	sub.	0 8	

Tor Point ..	sub.	1 55	From Liverpool.
Lough Larne ..	sub.	0 47	
Belfast ..	sub.	0 52	
Donaghadee ..	sub.	0 22	
Lough Strangford	sub.	0 42	
Warren Point ..	sub.	0 25	
Carlingford Bar..	sub.	0 55	
Howth Harbour..	sub.	0 26	
Dublin Bar ..	sub.	0 23	
Kingstown ..	sub.	0 25	
Wicklow ..	sub.	1 6	To or from Milford Haven.
Arklow ..	sub.	2 50	
Wexford ..	add	0 49	
New Ross ..	sub.	0 28	
Waterford (bridge)	sub.	0 26	
Do. (Duncan Fort)	sub.	1 12	
Dunmore ..	sub.	1 5	
Ballinacourty, Dun-			
garven ..	sub.	1 20	
Youghal ..	sub.	1 18	
Ballycottin..	sub.	1 38	
Cork ..	sub.	1 34	
Queenstown ..	sub.	1 31	
Kinsale ..	sub.	1 49	
Courtmaeskerry..	sub.	1 56	
Castletownsend ..	sub.	2 11	
Baltimore ..	sub.	2 9	
Cape Clear..	sub.	2 32	

Tidal Constants, continued.
FOREIGN AND COLONIAL.

	H. M.		H. M.
Adelaide, port, Aus.	sub. 0 48	Ichabo	sub. 5 32
Aden, Arabia ..	add 3 13	Jackson, Port ..	add 1 43
Auckland	add 0 33	Jersey, St. Hellier	sub. 4 7
Bayonne Bar. Fr.	sub. 2 47	Malaga	add 5 28
Bilbao, Spain ..	sub. 3 32	Malo, St.	sub. 0 27
Bombay	add 5 8	Melbourne	sub. 5 12
Bordeaux	add 0 18	Moreton Bay ..	add 2 58
Boston, U.S. ..	add 4 55	Natal, Port.. ..	sub. 2 2
Botany Bay	add 1 43	Nelson, New Zea.	add 3 18
Boulogne	add 4 53	New York	add 1 41
Brest	sub. 2 45	Oporto	sub. 4 2
Buenos Ayres ..	add 5 28	Ostend	add 5 53
Cadiz, Spain ..	sub. 4 47	Pernambuco ..	sub. 2 9
Calais	add 5 17	Philadelphia ..	sub. 5 14
Calcutta	sub. 4 2	Philip, Port, entr.	sub. 5 2
Callao Bay.. ..	sub. 0 45	Portland, U.S. ..	add 4 53
Canton River, ent.	add 3 28	Quebec	add 0 6
Charlestown, U.S.	add 0 41	Richmond, U.S...	sub. 2 4
Cherbourg	add 1 17	Rio Janeiro ..	sub. 3 32
Copiapó	add 1 58	Rochelle	sub. 3 1
Coquimbo	add 2 36	Royal, Port ..	add 4 28
Deleware, U.S. ..	add 1 28	Rotterdam	sub. 2 47
Dieppe	add 4 34	Rouen	sub. 4 4
Francisco, San ..	add 4 2	Savannah, City ..	add 1 41
Galle, Point de ..	sub. 4 32	Senegal	add 3 58
Gambia River ..	add 1 38	Singapore	add 3 13
Geelong	sub. 3 42	Suez Bay	sub. 4 32
Gibraltar	sub. 4 12	Sydney, Australia	add 2 6
Guernsey, St. Peter	add 0 16	Table Bay	sub. 3 52
Hamburg	sub. 1 3	Tangier	sub. 4 50
Hong Kong	add 3 43	Ushant	sub. 3 0
Horn, Cape	sub. 2 22	Valparaiso	add 3 0

To or from Milford Haven.

To or from Milford Haven.

MOON'S RISING AND SETTING.

At four days old it sets at, and shines till, about 10 at night.	16 at a quarter after.....	7
5 about 11	17 at half after	8
6 about 12	18 .....about.....	10
7 at near 1 in the morning.	19 .....about.....	11
14 at full it rises about 6 in the evening.	20 .....about.....	12

BRISTOL CHANNEL LIGHTS AND TOWER FOR SHIPS' GUIDANCE.

NAMES OF PLACES.	LIGHTS, AND TOWER.	HOW SHOWN.	DISTANCE SEEN.	ELEVATION OF LIGHTS, WITH REMARKS.
TREVOSE HEAD	Two..	{ Upper, fixed .. { Lower, " ..	.....	Upper, 204 feet, seen from South to E. $\frac{1}{2}$ S.
PADSTOW	Tower	{ Upper, revolves. { Lower, fixed ..	8 leag. clear weath 30 miles	Lower, 129 feet, seen from N.E. $\frac{1}{2}$ E. to S.W. $\frac{1}{2}$ W.
LUNDY ISLAND	Two..	{ Upper, fixed .. { Lower, " ..	28 miles	Elevated 264 feet above the level of the sea.
BIDEFORD	Two..	{ Upper, fixed .. { Lower, " ..	15 miles	Upper, 528 ft. revolves in 2 m. and seen all round.
ILFRACOMBE, Harb.	One..	Fixed, red	"	Lower, 9 ft. from ground, increased in power.
MINEHEAD, Harbour	One..	Fixed	"	Upper, 86 ft. } being 933 ft. asunder.
BURNHAM	Two..	{ Upper, flashes.. { Lower, fixed ..	.....	Shown from Michaelmas to Lady-day only.
FLATHOLM	One..	Fixed .....	.....	Shown during Tide Time.
FLOAT. LIGHT VESS.	One..	Revolving	16 miles	Elevated 91 $\frac{1}{2}$ ft.; flashes in 3 $\frac{1}{2}$ m., and seen from N.b.W. to W.b.N.
AVON, River	One..	Fixed, red .....	.....	Elevated 23 ft., seen from N.W.b.W. $\frac{1}{2}$ W. to W.b.N.
NASH POINT	Two..	{ Upper, fixed .. { Lower, " ..	12 miles	Elevated 156 ft. above high water.
MUMBLES	One..	Fixed .....	.....	Off the English Grounds.
SWANSEA, Harbour..	One..	Fixed, red .....	.....	Elevated 73 ft.; visible 13 miles.
SCARWEATHER SAND	One..	Revolving, red ..	.....	Elevated 167 feet, } being 1000 feet asunder.
LIGHT VESSEL	One..	Revolving .....	.....	" 123 feet, } Elevated 114 feet, } above high-water level.
CALDY ISLAND	One..	Fixed	19 miles	" 28 feet, } Elevated 38 feet; flashes in 20 seconds.
ST. ANN'S POINT ..	Two..	{ Upper, fixed .. { Lower, " ..	.....	Seen from sun-set to sun-rise, sides red, with, "Helwick" painted on them.
SMALLS	One..	Fixed, white	15 miles	Upper 192 feet, } Lower 159 feet, } above the level of the sea.
				Elevated 70 feet above high-water level.



THE
BRISTOL CHANNEL
ALMANACK
AND
TIDE TABLES;
TOGETHER WITH
PORT CHARGES,
PILOTAGE REGULATIONS,
&c., &c.,
FOR THE YEAR
1866.

This Year's issue contains important additions of Astronomical Tables, sufficient for all ordinary purposes of Navigation.

LONDON:
SIMPKIN, MARSHALL & CO., STATIONERS' HALL COURT.
SWANSEA:
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PREFACE.

IMPORTANT additions to this work were made in the issue for 1865, in a set of Solar and Lunar Tables sufficient for all ordinary purposes of Navigation, and this has been found to add materially to the utility of the work.

In the Times and Heights of High Water, calculations were at the same time made for Briton-Ferry, and added to that Edition.

The Port Charges, &c., have been collected with as much care as circumstances would permit, but should any errors or omissions be discovered, the Publishers will be glad to have them pointed out, that they may be corrected in future years; and any suggestions for the improvement of the work will also be gladly received, as it is their desire to make it in every respect as accurate and complete as possible.

The work now comprises :—

Calendar and Astronomical Tables ..pages	4 to 15
Tide Tables	pages 18 to 65
Port Charges, &c.....pages	66 to 103
Tidal Constants	pages 103 to 106

Swansea, Nov., 1865.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southings or Meridian Passage.	Sider'l Time of the Sun's Semidi- ameter passing the Meridian.*	THE SUN'S				Equation of Time.	Diff. for 1 hour
				Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter.†		
		h m	m s	h m s	° ' "	" ' "	m s	s	
1	Mon	12 42.6	1 11	18 47 31	23 0 17 S	12.53	16 18	3 52	1.177
2	Tue	13 36.6	1 11	18 51 55	22 55 8	13 67	16 18	4 20	1.163
3	Wed	14 27.4	1 11	18 56 20	22 49 21	14 81	16 18	4 48	1.148
4	Thu	15 15.3	1 11	19 0 43	22 43 12	15 94	16 18	5 15	1.131
5	Fri	16 0.8	1 11	19 5 7	22 36 37	17 07	16 18	5 42	1.113
6	Sat	16 44.6	1 11	19 9 30	22 29 34	18 18	16 18	6 9	1.095
7	Sun	17 27.6	1 11	19 13 53	22 22 4	19 29	16 18	6 35	1.076
8	Mon	18 10.5	1 11	19 18 15	22 14 8	20 39	16 18	7 1	1.055
9	Tue	18 54.1	1 11	19 22 36	22 5 46	21 47	16 18	7 26	1.033
10	Wed	19 38.9	1 11	19 26 57	21 56 58	22 55	16 18	7 50	1.010
11	Thu	20 25.4	1 10	19 31 18	21 47 45	23 62	16 18	8 14	0.987
12	Fri	21 13.8	1 10	19 35 38	21 38 5	24 67	16 18	8 37	0.962
13	Sat	22 4.0	1 10	19 39 57	21 28 1	25 71	16 18	9 0	0.936
14	Sun	22 55.5	1 10	19 44 16	21 17 32	26 74	16 18	9 22	0.909
15	Mon	23 47.7	1 10	19 48 34	21 6 38	27 76	16 18	9 44	0.882
16	Tue	conjunc	1 10	19 52 51	20 55 20	28 76	16 18	10 5	0.854
17	Wed	0 40.1	1 10	19 57 8	20 43 38	29 75	16 18	10 25	0.824
18	Thu	1 32.0	1 10	20 1 24	20 31 33	30 72	16 17	10 44	0.793
19	Fri	2 23.4	1 10	20 5 39	20 19 4	31 68	16 17	11 3	0.762
20	Sat	3 14.4	1 10	20 9 54	20 6 13	32 63	16 17	11 21	0.730
21	Sun	4 5.4	1 9	20 14 7	19 52 59	33 56	16 17	11 38	0.698
22	Mon	4 57.0	1 9	20 18 20	19 39 23	34 47	16 17	11 54	0.665
23	Tue	5 49.7	1 9	20 22 32	19 25 25	35 38	16 17	12 10	0.631
24	Wed	6 44.0	1 9	20 26 44	19 11 5	36 26	16 17	12 25	0.598
25	Thu	7 39.8	1 9	20 30 54	18 56 25	37 13	16 17	12 39	0.564
26	Fri	8 36.7	1 9	20 35 4	18 41 24	37 99	16 17	12 52	0.530
27	Sat	9 33.8	1 9	20 39 13	18 26 2	38 88	16 16	13 4	0.495
28	Sun	10 30.1	1 9	20 43 21	18 10 21	39 64	16 16	13 16	0.461
29	Mon	11 24.5	1 9	20 47 28	17 54 20	40 45	16 16	13 26	0.426
30	Tue	12 15.4	1 8	20 51 34	17 38 0	41 24	16 16	13 36	0.392
31	Wed	13 5.7	1 8	20 55 40	17 21 21	42 01	16 16	13 45	0.357

Subtract from Mean Time.

* Mean Time may be found by subtracting 0^m.19 from the *Sidercal*.† The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's		Sideral Time of the Sun's Semidi- ameter passing the Meridian.*	THE SUN'S										Equation of Time.	Diff. for 1 hour	
		Southing	or Meridian Passage.		Apparent Right Ascension.			Apparent Declination.			Diff. for 1 hour	Semi-diameter. §					
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s
1	Thu	13	52.6	1	8	20	59	45	17	4	24 S	42.77	16	16	13	53	0.323
2	Fri	14	37.7	1	8	21	3	49	16	47	9	43.51	16	16	14	0	0.289
3	Sat	15	21.6	1	8	21	7	52	16	29	36	44.23	16	15	14	7	0.255
4	Sun	16	4.9	1	8	21	11	54	16	11	46	44.94	16	15	14	13	0.221
5	Mon	16	48.4	1	8	21	15	55	15	53	39	45.64	16	15	14	18	0.188
6	Tue	17	32.5	1	8	21	19	56	15	35	16	46.31	16	15	14	22	0.155
7	Wed	18	17.9	1	8	21	23	56	15	16	37	46.96	16	15	14	25	0.122
8	Thu	19	4.9	1	7	21	27	55	14	57	42	47.60	16	15	14	28	0.090
9	Fri	19	53.7	1	7	21	31	53	14	38	32	48.23	16	14	14	29	0.058
10	Sat	20	44.0	1	7	21	35	51	14	19	7	48.84	16	14	14	30	0.026
11	Sun	21	35.6	1	7	21	39	48	13	59	28	49.42	16	14	14	31	0.006
12	Mon	22	28.1	1	7	21	43	44	13	39	36	49.99	16	14	14	30	0.037
13	Tue	23	20.8	1	7	21	47	39	13	19	29	50.54	16	14	14	29	0.068
14	Wed	conjunc		1	7	21	51	34	12	59	10	51.07	16	13	14	27	0.099
15	Thu	0	13.5	1	7	21	55	27	12	38	38	51.59	16	13	14	24	0.130
16	Fri	1	6.2	1	7	21	59	21	12	17	54	52.08	16	13	14	21	0.160
17	Sat	1	58.9	1	6	22	3	13	11	56	58	52.56	16	13	14	17	0.190
18	Sun	2	51.9	1	6	22	7	5	11	35	51	53.02	16	13	14	12	0.219
19	Mon	3	45.6	1	6	22	10	56	11	14	33	53.46	16	12	14	6	0.248
20	Tue	4	40.3	1	6	22	14	46	10	53	5	53.89	16	12	14	0	0.276
21	Wed	5	36.0	1	6	22	18	35	10	31	27	54.30	16	12	13	53	0.304
22	Thu	6	32.2	1	6	22	22	24	10	9	39	54.69	16	12	13	45	0.331
23	Fri	7	28.5	1	6	22	26	13	9	47	42	55.06	16	12	13	37	0.358
24	Sat	8	23.9	1	6	22	30	0	9	25	36	55.42	16	11	13	28	0.384
25	Sun	9	17.6	1	6	22	33	47	9	3	21	55.76	16	11	13	19	0.409
26	Mon	10	9.3	1	6	22	37	34	8	40	59	56.09	16	11	13	8	0.433
27	Tue	10	58.7	1	6	22	41	20	8	18	29	56.40	16	11	12	58	0.456
28	Wed	11	46.0	1	5	22	45	5	7	55	52	56.69	16	10	12	46	0.479

Subtract from Mean Time.

* Mean Time may be found by subtracting 0s.18 from the *Sidereal*.
 ‡ The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

Day of the Month.	Day of the Week.	Moon's		Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S										Equation of Time.	Diff. for 1 hour	
		Southing or Meridian Passage.			Apparent Right Ascension.			Apparent Declination.			Diff. for 1 hour	Semi- diam- eter.‡					
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s
1	Thu	12	31.6	1	5	22	48	50	7	33	8 S	56	97	16	10	12 35	0.501
2	Fri	13	15.9	1	5	22	52	34	7	10	17	57	23	16	10	12 22	0.522
3	Sat	13	59.6	1	5	22	56	18	6	47	20	57	48	16	10	12 10	0.542
4	Sun	14	43.2	1	5	23	0	1	6	24	18	57	70	16	9	11 56	0.560
5	Mon	15	27.1	1	5	23	3	44	6	1	10	57	92	16	9	11 43	0.578
6	Tue	16	11.9	1	5	23	7	26	5	37	57	58	12	16	9	11 29	0.595
7	Wed	16	57.9	1	5	23	11	9	5	14	40	58	30	16	9	11 14	0.611
8	Thu	17	45.2	1	5	23	14	50	4	51	18	58	47	16	8	10 59	0.627
9	Fri	18	33.9	1	5	23	18	32	4	27	53	58	63	16	8	10 44	0.641
10	Sat	19	23.9	1	5	23	22	13	4	4	24	58	76	16	8	10 29	0.655
11	Sun	20	14.8	1	5	23	25	53	3	40	52	58	88	16	8	10 13	0.667
12	Mon	21	6.6	1	5	23	29	34	3	17	17	58	98	16	7	9 57	0.680
13	Tue	21	58.9	1	5	23	33	14	2	53	40	59	07	16	7	9 40	0.691
14	Wed	22	51.7	1	5	23	36	54	2	30	1	59	15	16	7	9 23	0.702
15	Thu	23	45.1	1	5	23	40	33	2	6	21	59	21	16	6	9 6	0.711
16	Fri	conjunc		1	5	23	44	12	1	42	39	59	24	16	6	8 49	0.720
17	Sat	0	39.2	1	5	23	47	52	1	18	57	59	26	16	6	8 32	0.729
18	Sun	1	34.4	1	5	23	51	31	0	55	14	59	27	16	6	8 14	0.737
19	Mon	2	30.8	1	5	23	55	9	0	31	31	59	26	16	5	7 56	0.744
20	Tue	3	28.2	1	5	23	58	48	0	7	49 S	59	24	16	5	7 38	0.750
21	Wed	4	26.0	1	4	0	2	26	0	15	53 N	59	20	16	5	7 20	0.756
22	Thu	5	23.6	1	4	0	6	5	0	39	33	59	14	16	5	7 2	0.761
23	Fri	6	19.9	1	4	0	9	43	1	3	12	59	07	16	4	6 44	0.765
24	Sat	7	14.3	1	4	0	13	21	1	26	50	58	99	16	4	6 25	0.768
25	Sun	8	6.2	1	4	0	16	59	1	50	25	58	89	16	4	6 7	0.770
26	Mon	8	55.6	1	4	0	20	37	2	13	57	58	78	16	3	5 48	0.772
27	Tue	9	42.8	1	4	0	24	15	2	37	26	58	64	16	3	5 30	0.773
28	Wed	10	28.3	1	4	0	27	53	3	0	53	58	50	16	3	5 11	0.773
29	Thu	11	12.5	1	4	0	31	31	3	24	15	58	35	16	3	4 53	0.771
30	Fri	11	56.1	1	4	0	35	9	3	47	34	58	18	16	2	4 34	0.769
31	Sat	12	39.5	1	4	0	38	47	4	10	48	58	00	16	2	4 16	0.766

Subtract from Mean Time.

* Mean Time may be found by subtracting 0s.18 from the *Sidereal*.
 ‡ The Semidiameter for *Apparent* Noon may be assumed the same as that for *Mean* Noon.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.		Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S										Equation of Time.	Diff. for 1 hour	
					Apparent Right Ascension.			Apparent Declination.			Diff. for 1 hour	Semi- diam- eter.‡					
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s
1	Sun	13	23·3	1	4	0	42	26	4	33	58 N	57·80	16	2	3	58	0·762
2	Mon	14	7·8	1	5	0	46	4	4	57	3	57·58	16	1	3	39	0·756
3	Tue	14	53·3	1	5	0	49	42	5	20	3	57·36	16	1	3	21	0·750
4	Wed	15	39·9	1	5	0	53	21	5	42	57	57·13	16	1	3	3	0·743
5	Thu	16	27·5	1	5	0	57	0	6	5	46	56·88	16	1	2	46	0·735
6	Fri	17	16·1	1	5	1	0	39	6	28	28	56·61	16	0	2	28	0·727
7	Sat	18	5·5	1	5	1	4	18	6	51	3	56·33	16	0	2	11	0·717
8	Sun	18	55·5	1	5	1	7	58	7	13	32	56·03	16	0	1	54	0·706
9	Mon	19	46·1	1	5	1	11	37	7	35	53	55·72	16	0	1	37	0·695
10	Tue	20	37·2	1	5	1	15	17	7	58	7	55·40	15	59	1	20	0·684
11	Wed	21	29·2	1	5	1	18	58	8	20	13	55·06	15	59	1	4	0·672
12	Thu	22	22·4	1	5	1	22	38	8	42	10	54·71	15	59	0	48	0·659
13	Fri	23	17·1	1	5	1	26	19	9	3	59	54·34	15	58	0	32	0·645
14	Sat	conjunc		1	5	1	30	0	9	25	39	53·96	15	58	0	17	0·631
15	Sun	0	13·8	1	5	1	33	42	9	47	10	53·56	15	58	0	2	0·617
16	Mon	1	12·3	1	5	1	37	24	10	8	31	53·15	15	58	0	13	0·602
17	Tue	2	12·1	1	5	1	41	6	10	29	41	52·73	15	57	0	27	0·586
18	Wed	3	12·3	1	5	1	44	49	10	50	42	52·29	15	57	0	41	0·570
19	Thu	4	11·4	1	5	1	48	32	11	11	32	51·83	15	57	0	54	0·554
20	Fri	5	8·3	1	5	1	52	15	11	32	10	51·36	15	57	1	7	0·538
21	Sat	6	2·3	1	5	1	55	59	11	52	37	50·88	15	56	1	20	0·521
22	Sun	6	53·1	1	5	1	59	43	12	12	53	50·39	15	56	1	32	0·503
23	Mon	7	41·2	1	5	2	3	28	12	32	56	49·83	15	56	1	44	0·485
24	Tue	8	27·0	1	6	2	7	13	12	52	47	49·35	15	56	1	56	0·466
25	Wed	9	11·2	1	6	2	10	59	13	12	25	48·81	15	55	2	7	0·447
26	Thu	9	54·6	1	6	2	14	45	13	31	50	48·26	15	55	2	17	0·427
27	Fri	10	37·7	1	6	2	18	31	13	51	2	47·70	15	55	2	27	0·407
28	Sat	11	21·1	1	6	2	22	18	14	10	0	47·13	15	55	2	37	0·386
29	Sun	12	5·2	1	6	2	26	6	14	28	44	46·54	15	54	2	46	0·364
30	Mon	12	50·4	1	6	2	29	54	14	47	14	45·94	15	54	2	54	0·342

Subtract from Mean Time.

Add to Mean Time.

* Mean Time may be found by subtracting 0^m·18 from the Sidereal.

† The Semidiameter for Apparent Noon may be assumed the same as that for Mean Noon.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.		Sideral Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S										Equation of Time.	Di- f		
					Apparent Right Ascension.			Apparent Declination.			Diff. for 1 hour		Semi- diam- eter.‡					
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s	
1	Tue	13	36·7	1	6	2	33	43	15	5	29	N	45·32	15	54	3	2	0·31
2	Wed	14	24·0	1	6	2	37	32	15	23	30		44·69	15	54	3	9	0·29
3	Thu	15	12·1	1	6	2	41	22	15	41	15		44·06	15	53	3	16	0·27
4	Fri	16	0·8	1	6	2	45	12	15	58	44		43·41	15	53	3	23	0·24
5	Sat	16	49·8	1	6	2	49	3	16	15	58		42·74	15	53	3	28	0·22
6	Sun	17	39·0	1	6	2	52	54	16	32	56		42·07	15	53	3	33	0·20
7	Mon	18	28·3	1	7	2	56	46	16	49	38		41·38	15	53	3	38	0·17
8	Tue	19	18·1	1	7	3	0	39	17	6	2		40·67	15	52	3	42	0·15
9	Wed	20	8·9	1	7	3	4	32	17	22	10		39·96	15	52	3	45	0·12
10	Thu	21	1·2	1	7	3	8	26	17	38	0		39·23	15	52	3	48	0·10
11	Fri	21	55·7	1	7	3	12	20	17	53	33		38·49	15	52	3	50	0·07
12	Sat	22	52·7	1	7	3	16	15	18	8	48		37·74	15	51	3	52	0·05
13	Sun	23	52·2	1	7	3	20	11	18	23	44		36·97	15	51	3	53	0·03
14	Mon	conjunc		1	7	3	24	7	18	38	22		36·20	15	51	3	53	0·00
15	Tue	0	53·4	1	7	3	28	3	18	52	41		35·41	15	51	3	53	0·01
16	Wed	1	55·0	1	7	3	32	1	19	6	41		34·60	15	51	3	52	0·04
17	Thu	2	55·2	1	7	3	35	59	19	20	22		33·79	15	50	3	51	0·06
18	Fri	3	52·6	1	7	3	39	57	19	33	43		32·97	15	50	3	49	0·08
19	Sat	4	46·6	1	7	3	43	56	19	46	45		32·13	15	50	3	47	0·1
20	Sun	5	37·0	1	8	3	47	55	19	59	26		31·28	15	50	3	44	0·13
21	Mon	6	24·5	1	8	3	51	55	20	11	46		30·43	15	50	3	41	0·15
22	Tue	7	9·7	1	8	3	55	56	20	23	46		29·56	15	50	3	37	0·17
23	Wed	7	53·4	1	8	3	59	57	20	35	25		28·68	15	49	3	32	0·19
24	Thu	8	36·5	1	8	4	3	58	20	46	43		27·79	15	49	3	27	0·21
25	Fri	9	19·6	1	8	4	8	0	20	57	39		26·90	15	49	3	22	0·23
26	Sat	10	3·3	1	8	4	12	3	21	8	13		25·99	15	49	3	16	0·25
27	Sun	10	48·0	1	8	4	16	6	21	18	26		25·07	15	49	3	9	0·27
28	Mon	11	34·0	1	8	4	20	9	21	28	17		24·15	15	49	3	3	0·29
29	Tue	12	21·2	1	8	4	24	13	21	37	45		23·22	15	48	2	55	0·31
30	Wed	13	9·4	1	8	4	28	17	21	46	51		22·28	15	48	2	48	0·33
31	Thu	13	58·2	1	8	4	32	22	21	55	35		21·33	15	48	2	39	0·35

Add to Mean Time.

* Mean Time may be found by subtracting 0s·18 from the Sidereal.

‡ The Semidiameter for Apparent Noon may be assumed the same as that for Mean Noon.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's		Sideral Time of the Sun's Semidiameter passing the Meridian.*	THE SUN'S							Equation of Time.	Diff. for 1 hour						
		Southings	or Meridian Passage.		Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi-diam- eter. ‡											
h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s				
1	Fri	14	47.2	1	8	4	36	27	22	3	55	N	20	38	15	48	2	31	0.369
2	Sat	15	36.2	1	8	4	40	33	22	11	53		19	42	15	48	2	22	0.386
3	Sun	16	24.9	1	9	4	44	39	22	19	27		18	45	15	48	2	12	0.402
4	Mon	17	13.5	1	9	4	48	45	22	26	38		17	47	15	48	2	2	0.418
5	Tue	18	2.4	1	9	4	52	52	22	33	25		16	49	15	48	1	52	0.433
6	Wed	18	52.3	1	9	4	56	59	22	39	49		15	50	15	47	1	42	0.447
7	Thu	19	43.8	1	9	5	1	7	22	45	49		14	50	15	47	1	31	0.460
8	Fri	20	37.7	1	9	5	5	14	22	51	25		13	50	15	47	1	19	0.473
9	Sat	21	34.3	1	9	5	9	22	22	56	37		12	50	15	47	1	8	0.485
10	Sun	22	33.7	1	9	5	13	31	23	1	25		11	49	15	47	0	56	0.496
11	Mon	23	34.9	1	9	5	17	39	23	5	49		10	48	15	47	0	44	0.506
12	Tue	conjunction		1	9	5	21	48	23	9	48		9	46	15	47	0	32	0.514
13	Wed	0	36.4	1	9	5	25	57	23	13	23		8	44	15	47	0	19	0.522
14	Thu	1	36.5	1	9	5	30	6	23	16	33		7	42	15	47	0	7	0.528
15	Fri	2	33.8	1	9	5	34	16	23	19	19		6	39	15	47	0	6	0.533
16	Sat	3	27.5	1	9	5	38	25	23	21	40		5	36	15	46	0	19	0.537
17	Sun	4	17.8	1	9	5	42	34	23	23	36		4	33	15	46	0	32	0.539
18	Mon	5	5.1	1	9	5	46	44	23	25	8		3	30	15	46	0	45	0.540
19	Tue	5	50.2	1	9	5	50	53	23	26	15		2	27	15	46	0	58	0.541
20	Wed	6	34.0	1	9	5	55	3	23	26	57		1	23	15	46	1	11	0.541
21	Thu	7	17.3	1	9	5	59	13	23	27	14		0	20	15	46	1	23	0.540
22	Fri	8	0.8	1	9	6	3	22	23	27	6		0	84	15	46	1	36	0.538
23	Sat	8	45.1	1	9	6	7	31	23	26	34		1	87	15	46	1	49	0.535
24	Sun	9	30.5	1	9	6	11	41	23	25	37		2	90	15	46	2	2	0.531
25	Mon	10	17.3	1	9	6	15	50	23	24	15		3	93	15	46	2	15	0.526
26	Tue	11	5.4	1	9	6	19	59	23	22	28		4	96	15	46	2	27	0.520
27	Wed	11	54.5	1	9	6	24	8	23	20	17		5	98	15	46	2	40	0.514
28	Thu	12	44.1	1	9	6	28	17	23	17	41		7	00	15	46	2	52	0.507
29	Fri	13	33.6	1	9	6	32	26	23	14	41		8	03	15	46	3	4	0.499
30	Sat	14	22.9	1	9	6	36	34	23	11	16		9	05	15	46	3	16	0.490

* Mean Time may be found by subtracting 0.19 from the *Sidereal*.

‡ The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.		Sideral Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S										Equation of Time.	Diff. for 1 hour	
					Apparent Right Ascension.			Apparent Declination.			Diff. for 1 hour	Semi- diam- eter.†					
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s
1	Sun	15	11·8	1	9	6	40	42	23	7	27 N	10·06	15	46	3	28	0·480
2	Mon	16	0·4	1	9	6	44	50	23	3	14	11·07	15	46	3	39	0·470
3	Tue	16	49·3	1	9	6	48	58	22	58	36	12·07	15	46	3	50	0·459
4	Wed	17	39·1	1	9	6	53	5	22	53	34	13·07	15	46	4	1	0·447
5	Thu	18	30·5	1	9	6	57	13	22	48	9	14·07	15	46	4	12	0·435
6	Fri	19	24·1	1	9	7	1	19	22	42	19	15·06	15	46	4	22	0·421
7	Sat	20	20·3	1	9	7	5	26	22	36	6	16·04	15	46	4	32	0·407
8	Sun	21	18·9	1	8	7	9	32	22	29	29	17·02	15	46	4	42	0·392
9	Mon	22	19·0	1	8	7	13	38	22	22	29	17·99	15	46	4	51	0·376
10	Tue	23	19·2	1	8	7	17	43	22	15	6	18·95	15	46	5	0	0·360
11	Wed	conjunc		1	8	7	21	48	22	7	20	19·90	15	46	5	8	0·343
12	Thu	0	17·9	1	8	7	25	53	21	59	11	20·85	15	46	5	16	0·324
13	Fri	1	13·9	1	8	7	29	57	21	50	39	21·79	15	46	5	24	0·304
14	Sat	2	6·7	1	8	7	34	0	21	41	45	22·72	15	46	5	31	0·283
15	Sun	2	56·5	1	8	7	38	4	21	32	29	23·64	15	46	5	37	0·262
16	Mon	3	43·6	1	8	7	42	6	21	22	51	24·55	15	46	5	43	0·240
17	Tue	4	28·8	1	8	7	46	8	21	12	51	25·46	15	46	5	49	0·218
18	Wed	5	13·0	1	8	7	50	10	21	2	29	26·35	15	46	5	54	0·196
19	Thu	5	56·8	1	8	7	54	11	20	51	46	27·23	15	47	5	58	0·172
20	Fri	6	40·9	1	8	7	58	11	20	40	42	28·10	15	47	6	2	0·149
21	Sat	7	25·8	1	8	8	2	11	20	29	18	28·97	15	47	6	5	0·125
22	Sun	8	12·0	1	7	8	6	10	20	17	32	29·82	15	47	6	8	0·100
23	Mon	8	59·5	1	7	8	10	9	20	5	26	30·66	15	47	6	10	0·076
24	Tue	9	48·2	1	7	8	14	7	19	53	0	31·50	15	47	6	12	0·052
25	Wed	10	37·9	1	7	8	18	5	19	40	15	32·32	15	47	6	13	0·027
26	Thu	11	28·0	1	7	8	22	1	19	27	9	33·13	15	47	6	13	0·002
27	Fri	12	18·2	1	7	8	25	58	19	13	44	33·93	15	47	6	13	0·023
28	Sat	13	8·1	1	7	8	29	53	19	0	1	34·72	15	47	6	12	0·048
29	Sun	13	57·7	1	7	8	33	49	18	45	58	35·50	15	47	6	10	0·073
30	Mon	14	47·3	1	7	8	37	43	18	31	37	36·27	15	48	6	8	0·098
31	Tue	15	37·1	1	7	8	41	37	18	16	57	37·03	15	48	6	6	0·123

* Mean Time may be found by subtracting 0s·19 from the *Sidereal*.

† The Semidiameter for *Apparent* Noon may be assumed the same as that for *Mean* Noon.

AT GREENWICH MEAN NOON.

Day of the Month. Day of the Week.	Moon's Southing or Meridian Passage.		Sideral Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*		THE SUN'S								Equation of Time.		Diff. for 1 hour	
	h	m	m	s	h	m	s	°	'	"	N	Diff. for 1 hour	Semi- diam- eter.‡	m	s	s
1 Wed	16	27.9	1	7	8	45	30	18	2	0	N	37.77	15 48	6	2	0.147
2 Thu	17	20.2	1	7	8	49	23	17	46	44		38 51	15 48	5	59	0.171
3 Fri	18	14.3	1	6	8	53	15	17	31	11		39 23	15 48	5	54	0.195
4 Sat	19	10.5	1	6	8	57	7	17	15	21		39 94	15 48	5	49	0.219
5 Sun	20	8.3	1	6	9	0	58	16	59	14		40 63	15 48	5	44	0.243
6 Mon	21	6.7	1	6	9	4	48	16	42	51		41 32	15 49	5	38	0.267
7 Tue	22	4.7	1	6	9	8	38	16	26	11		41 99	15 49	5	31	0.291
8 Wed	23	1.0	1	6	9	12	27	16	9	16		42 64	15 49	5	24	0.315
9 Thu	23	54.8	1	6	9	16	16	15	52	4		43 29	15 49	5	16	0.339
10 Fri	conjunc		1	6	9	20	4	15	34	38		43 92	15 49	5	7	0.363
11 Sat	0	46.0	1	6	9	23	52	15	16	56		44 54	15 49	4	58	0.387
12 Sun	1	34.6	1	6	9	27	39	14	59	0		45 14	15 49	4	49	0.411
13 Mon	2	21.3	1	6	9	31	25	14	40	49		45 73	15 50	4	39	0.434
14 Tue	3	6.5	1	6	9	35	11	14	22	25		46 30	15 50	4	28	0.457
15 Wed	3	50.9	1	5	9	38	56	14	3	47		46 87	15 50	4	17	0.480
16 Thu	4	35.3	1	5	9	42	41	13	44	55		47 42	15 50	4	5	0.502
17 Fri	5	20.0	1	5	9	46	25	13	25	50		47 96	15 50	3	53	0.524
18 Sat	6	5.6	1	5	9	50	9	13	6	33		48 48	15 51	3	40	0.546
19 Sun	6	52.3	1	5	9	53	52	12	47	3		49 00	15 51	3	26	0.567
20 Mon	7	40.2	1	5	9	57	35	12	27	20		49 50	15 51	3	13	0.588
21 Tue	8	29.1	1	5	10	1	17	12	7	27		49 98	15 51	2	58	0.608
22 Wed	9	19.0	1	5	10	4	59	11	47	21		50 45	15 51	2	43	0.627
23 Thu	10	9.3	1	5	10	8	40	11	27	5		50 91	15 52	2	28	0.646
24 Fri	10	59.8	1	5	10	12	21	11	6	37		51 35	15 52	2	12	0.665
25 Sat	11	50.4	1	5	10	16	1	10	45	59		51 78	15 52	1	56	0.682
26 Sun	12	41.0	1	5	10	19	41	10	25	11		52 20	15 52	1	40	0.699
27 Mon	13	32.0	1	5	10	23	21	10	4	13		52 61	15 52	1	23	0.715
28 Tue	14	23.7	1	5	10	27	0	9	43	5		53 01	15 53	1	5	0.730
29 Wed	15	16.5	1	5	10	30	39	9	21	48		53 39	15 53	0	48	0.744
30 Thu	16	10.7	1	5	10	34	18	9	0	22		53 76	15 53	0	30	0.757
31 Fri	17	6.4	1	4	10	37	56	8	38	47		54 12	15 53	0	11	0.770

Subtract from Mean Time.

* Mean Time may be found by subtracting 0^h 18^m from the *Sidereal*.
 ‡ The Semidiameter for *Apparent* Noon may be assumed the same
 as that for *Mean* Noon.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.		Sideral Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S										Equation of Time.	Diff. for 1 hour	
					Apparent Right Ascension.			Apparent Declination.			Diff. for 1 hour	Semi- diam- eter.‡					
		h	m		s	m	s	h	m	s	°	'	"	"			'
1	Sat	18	3.2	1	4	10	41	34	8	17	4 N	54.46	15	54	0	7	0.782
2	Sun	19	0.5	1	4	10	45	11	7	55	12	54.80	15	54	0	26	0.793
3	Mon	19	57.4	1	4	10	48	49	7	33	13	55.11	15	54	0	45	0.803
4	Tue	20	53.0	1	4	10	52	26	7	11	6	55.41	15	54	1	5	0.813
5	Wed	21	46.5	1	4	10	56	3	6	48	52	55.70	15	54	1	24	0.822
6	Thu	22	37.7	1	4	10	59	40	6	26	32	55.98	15	55	1	44	0.830
7	Fri	23	26.7	1	4	11	3	16	6	4	5	56.24	15	55	2	4	0.838
8	Sat	conjunc		1	4	11	6	52	5	41	32	56.49	15	55	2	25	0.846
9	Sun	0	13.9	1	4	11	10	28	5	18	53	56.72	15	55	2	45	0.853
10	Mon	0	59.6	1	4	11	14	4	4	56	9	56.93	15	56	3	6	0.859
11	Tue	1	44.6	1	4	11	17	40	4	33	19	57.14	15	56	3	26	0.864
12	Wed	2	29.2	1	4	11	21	16	4	10	25	57.33	15	56	3	47	0.869
13	Thu	3	14.0	1	4	11	24	52	3	47	27	57.50	15	56	4	8	0.873
14	Fri	3	59.3	1	4	11	28	27	3	24	25	57.66	15	57	4	29	0.876
15	Sat	4	45.4	1	4	11	32	3	3	1	19	57.81	15	57	4	50	0.879
16	Sun	5	32.4	1	4	11	35	38	2	38	9	57.94	15	57	5	11	0.881
17	Mon	6	20.3	1	4	11	39	14	2	14	57	58.06	15	57	5	32	0.882
18	Tue	7	9.0	1	4	11	42	49	1	51	42	58.16	15	58	5	53	0.882
19	Wed	7	58.4	1	4	11	46	24	1	28	24	58.25	15	58	6	15	0.881
20	Thu	8	48.2	1	4	11	50	0	1	5	5	58.33	15	58	6	36	0.879
21	Fri	9	38.5	1	4	11	53	35	0	41	44	58.39	15	59	6	57	0.877
22	Sat	10	29.3	1	4	11	57	11	0	18	21 N	58.44	15	59	7	18	0.873
23	Sun	11	20.8	1	4	12	0	46	0	5	2 S	58.48	15	59	7	39	0.869
24	Mon	12	13.3	1	4	12	4	22	0	28	26	58.50	15	59	8	0	0.864
25	Tue	13	7.1	1	4	12	7	58	0	51	51	58.51	16	0	8	20	0.857
26	Wed	14	2.6	1	4	12	11	34	1	15	15	58.50	16	0	8	41	0.849
27	Thu	14	59.5	1	4	12	15	10	1	38	39	58.49	16	0	9	1	0.840
28	Fri	15	57.5	1	4	12	18	47	2	2	3	58.46	16	1	9	21	0.830
29	Sat	16	55.7	1	4	12	22	24	2	25	26	58.41	16	1	9	41	0.820
30	Sun	17	53.2	1	4	12	26	1	2	48	47	58.35	16	1	10	0	0.808

Add to Mean Time.

* Mean Time may be found by subtracting 0s. 18 from the *Sidereal*.
 ‡ The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southings or Meridian Passage.	Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S								Equation of Time.	Diff. for 1 hour
				Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter.†						
		h m	m s	h m s	° ' "	"	"	"	"	m s	s		
1 Mon		18 49.0	1	4 12 29 38	3 12 7 S	58.28	16	1	10 20	0.796			
2 Tue		19 42.5	1	4 12 33 16	3 35 25	58.19	16	2	10 39	0.782			
3 Wed		20 33.6	1	4 12 36 53	3 58 41	58.08	16	2	10 57	0.768			
4 Thu		21 22.4	1	4 12 40 32	4 21 54	57.96	16	2	11 15	0.754			
5 Fri		22 9.3	1	5 12 44 10	4 45 3	57.82	16	2	11 33	0.739			
6 Sat		22 54.9	1	5 12 47 49	5 8 10	57.67	16	3	11 51	0.722			
7 Sun		23 39.7	1	5 12 51 29	5 31 12	57.50	16	3	12 8	0.705			
8 Mon	conjunc		1	5 12 55 9	5 54 10	57.32	16	3	12 25	0.687			
9 Tue		0 24.3	1	5 12 58 49	6 17 4	57.12	16	3	12 41	0.669			
10 Wed		1 8.9	1	5 13 2 30	6 39 53	56.91	16	4	12 57	0.650			
11 Thu		1 54.1	1	5 13 6 11	7 2 36	56.68	16	4	13 12	0.630			
12 Fri		2 39.9	1	5 13 9 53	7 25 13	56.43	16	4	13 27	0.610			
13 Sat		3 26.4	1	5 13 13 35	7 47 45	56.16	16	5	13 41	0.589			
14 Sun		4 13.6	1	5 13 17 17	8 10 10	55.88	16	5	13 55	0.567			
15 Mon		5 1.4	1	5 13 21 1	8 32 27	55.58	16	5	14 9	0.545			
16 Tue		5 49.5	1	5 13 24 44	8 54 38	55.27	16	5	14 22	0.522			
17 Wed		6 37.9	1	5 13 28 29	9 16 41	54.94	16	6	14 34	0.498			
18 Thu		7 26.8	1	5 13 32 14	9 38 36	54.60	16	6	14 45	0.474			
19 Fri		8 16.1	1	6 13 35 59	10 0 22	54.24	16	6	14 57	0.449			
20 Sat		9 6.4	1	6 13 39 45	10 22 0	53.86	16	7	15 7	0.423			
21 Sun		9 57.9	1	6 13 43 32	10 43 28	53.47	16	7	15 17	0.397			
22 Mon		10 51.3	1	6 13 47 19	11 4 46	53.06	16	7	15 26	0.370			
23 Tue		11 46.8	1	6 13 51 7	11 25 55	52.64	16	7	15 35	0.341			
24 Wed		12 44.7	1	6 13 54 56	11 46 53	52.20	16	8	15 42	0.312			
25 Thu		13 44.4	1	6 13 58 45	12 7 40	51.75	16	8	15 50	0.282			
26 Fri		14 44.9	1	6 14 2 35	12 28 17	51.28	16	8	15 56	0.251			
27 Sat		15 45.1	1	6 14 6 26	12 48 41	50.78	16	8	16 2	0.220			
28 Sun		16 43.3	1	6 14 10 18	13 8 54	50.28	16	9	16 6	0.188			
29 Mon		17 38.7	1	7 14 14 11	13 28 55	49.76	16	9	16 11	0.155			
30 Tue		18 31.1	1	7 14 18 4	13 48 42	49.22	16	9	16 14	0.122			
31 Wed		19 20.6	1	7 14 21 58	14 8 17	48.67	16	9	16 16	0.089			

Add to Mean Time.

* Mean Time may be found by subtracting 0s.18 from the *Sidereal*.
 † The Semidiameter for *Apparent Noon* may be assumed the same
 as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.		Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S										Equation of Time.	Diff. for 1 hour	
					Apparent Right Ascension.		Apparent Declination.		Diff. for 1 hour	Semi- diam- eter.‡							
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s
1	Thu	20	7.7	1	7	14	25	53	14	27	38 S	48.10	16	10	16	18	0.055
2	Fri	20	53.1	1	7	14	29	48	14	46	46	47.51	16	10	16	19	0.021
3	Sat	21	37.6	1	7	14	33	45	15	5	38	46.90	16	10	16	19	0.014
4	Sun	22	21.6	1	7	14	37	42	15	24	17	46.28	16	10	16	18	0.048
5	Mon	23	5.9	1	7	14	41	40	15	42	39	44.64	16	11	16	17	0.083
6	Tue	23	50.6	1	8	14	45	39	16	0	47	44.98	16	11	16	14	0.118
7	Wed	conjunc		1	8	14	49	39	16	18	38	44.31	16	11	16	11	0.153
8	Thu	0	36.2	1	8	14	53	40	16	36	13	43.61	16	11	16	7	0.188
9	Fri	1	22.5	1	8	14	57	41	16	53	31	42.90	16	12	16	2	0.223
10	Sat	2	9.5	1	8	15	1	44	17	10	32	42.18	16	12	15	56	0.258
11	Sun	2	56.9	1	8	15	5	47	17	27	15	41.43	16	12	15	50	0.293
12	Mon	3	44.5	1	8	15	9	51	17	43	40	40.67	16	12	15	42	0.328
13	Tue	4	32.1	1	8	15	13	56	17	59	46	39.89	16	12	15	34	0.363
14	Wed	5	19.6	1	8	15	18	1	18	15	34	39.10	16	13	15	25	0.397
15	Thu	6	7.2	1	9	15	22	8	18	31	2	38.28	16	13	15	15	0.432
16	Fri	6	55.3	1	9	15	26	15	18	46	11	37.45	16	13	15	4	0.466
17	Sat	7	44.4	1	9	15	30	23	19	0	59	36.61	16	13	14	52	0.500
18	Sun	8	35.2	1	9	15	34	32	19	15	27	35.75	16	13	14	40	0.533
19	Mon	9	28.4	1	9	15	38	42	19	29	34	34.87	16	14	14	27	0.567
20	Tue	10	24.6	1	9	15	42	53	19	43	20	33.98	16	14	14	13	0.601
21	Wed	11	23.7	1	9	15	47	4	19	56	45	33.08	16	14	13	58	0.634
22	Thu	12	25.2	1	9	15	51	16	20	9	47	32.16	16	14	13	42	0.667
23	Fri	13	27.7	1	10	15	55	29	20	22	28	31.23	16	14	13	26	0.700
24	Sat	14	29.4	1	10	15	59	43	20	34	46	30.28	16	15	13	9	0.733
25	Sun	15	28.6	1	10	16	3	57	20	46	40	29.31	16	15	12	51	0.765
26	Mon	16	24.4	1	10	16	8	13	20	58	12	28.34	16	15	12	32	0.796
27	Tue	17	16.5	1	10	16	12	29	21	9	20	27.35	16	15	12	12	0.827
28	Wed	18	5.4	1	10	16	16	45	21	20	4	26.35	16	15	11	52	0.858
29	Thu	18	51.9	1	10	16	21	3	21	30	24	25.34	16	16	11	31	0.888
30	Fri	19	36.7	1	10	16	25	21	21	40	20	24.31	16	16	11	10	0.916

* Mean Time may be found by subtracting 0^m.19 from the *Sidereal*.

† The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.		Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S								Equation of Time.	Diff. for 1 hour			
					Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter. §	Add to Mean Time.								
h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s		
1	Sat	20	20·6	1	10	16	29	40	21	49	50 S	23·26	16	16	10	47	0·944
2	Sun	21	4·4	1	10	16	34	0	21	58	56	22·21	16	16	10	24	0·972
3	Mon	21	48·7	1	10	16	38	20	22	7	36	21·15	16	16	10	1	0·998
4	Tue	22	33·7	1	11	16	42	41	22	15	50	20·08	16	16	9	36	1·023
5	Wed	23	19·7	1	11	16	47	2	22	23	39	18·99	16	16	9	12	1·046
6	Thu	conjunc		1	11	16	51	24	22	31	1	17·90	16	16	8	46	1·069
7	Fri	0	6·6	1	11	16	55	46	22	37	57	16·79	16	17	8	20	1·090
8	Sat	0	54·1	1	11	17	0	9	22	44	27	15·68	16	17	7	54	1·110
9	Sun	1	41·8	1	11	17	4	33	22	50	30	14·56	16	17	7	27	1·129
10	Mon	2	29·5	1	11	17	8	57	22	56	5	13·43	16	17	7	0	1·145
11	Tue	3	16·9	1	11	17	13	21	23	1	14	12·29	16	17	6	32	1·161
12	Wed	4	3·8	1	11	17	17	45	23	5	55	11·15	16	17	6	4	1·176
13	Thu	4	50·7	1	11	17	22	10	23	10	8	9·99	16	17	5	36	1·189
14	Fri	5	37·9	1	11	17	26	36	23	13	54	8·84	16	17	5	7	1·200
15	Sat	6	26·0	1	11	17	31	1	23	17	12	7·68	16	17	4	38	1·210
16	Sun	7	15·9	1	11	17	35	27	23	20	2	6·51	16	18	4	9	1·219
17	Mon	8	8·4	1	11	17	39	53	23	22	24	5·34	16	18	3	40	1·227
18	Tue	9	4·0	1	11	17	44	19	23	24	18	4·16	16	18	3	10	1·233
19	Wed	10	2·9	1	11	17	48	45	23	25	44	2·99	16	18	2	40	1·238
20	Thu	11	4·6	1	11	17	53	11	23	26	41	1·81	16	18	2	11	1·242
21	Fri	12	7·5	1	11	17	57	38	23	27	10	0·63	16	18	1	41	1·245
22	Sat	13	9·6	1	11	18	2	4	23	27	11	0·55	16	18	1	11	1·246
23	Sun	14	9·2	1	11	18	6	31	23	26	44	1·73	16	18	0	41	1·246
24	Mon	15	5·2	1	11	18	10	57	23	25	48	2·91	16	18	0	11	1·245
25	Tue	15	57·6	1	11	18	15	23	23	24	25	4·09	16	18	0	19	1·242
26	Wed	16	46·7	1	11	18	19	50	23	22	32	5·26	16	18	0	48	1·238
27	Thu	17	33·3	1	11	18	24	16	23	20	12	6·44	16	18	1	18	1·233
28	Fri	18	18·3	1	11	18	28	42	23	17	24	7·61	16	18	1	48	1·227
29	Sat	19	2·5	1	11	18	33	8	23	14	7	8·78	16	18	2	17	1·219
30	Sun	19	46·6	1	11	18	37	34	23	10	22	9·94	16	18	2	46	1·210
31	Mon	20	31·2	1	11	18	41	59	23	6	10	11·10	16	18	3	15	1·199

* Mean Time may be found by subtracting 0^m·19 from the *Sidereal*.

† The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

BRISTOL CHANNEL LIGHTS AND TOWER FOR SHIPS' GUIDANCE.

NAMES OF PLACES.	LIGHTS, AND TOWER.	HOW SHOWN.	DISTANCE SEEN.	ELEVATION OF LIGHTS, WITH REMARKS.
TREVOSE HEAD	Two..	{ Upper, fixed .. Lower, " ..	..... .....	Upper, 204 feet, seen from South to E. $\frac{1}{2}$ S. Lower, 129 feet, seen from N.E. $\frac{1}{2}$ E. to S.W. $\frac{1}{2}$ W. Elevated 264 feet above the level of the sea.
PADSTOW	Tower	{ Upper, revolves. Lower, fixed ..	8 leagues clear weath 30 miles	Upper, 528 ft. revolves in 2 m. and seen all round. Lower, 9 ft. from ground, increased in power.
LUNDY ISLAND	Two..	{ Upper, fixed .. Lower, " ..	28 miles	Upper, 86 ft } being 933 ft. asunder. Lower, 40 ft }
BIDEFORD	Two..	{ Fixed, red .....	.....	Shown from Michaelmas to Lady-day only.
ILFRACOMBE, Harb.	One..	{ Fixed .....	.....	Shown during Tide Time.
MINEHEAD, Harbour	One..	{ Upper, flashes..	.....	Elevated 91 $\frac{1}{2}$ ft.; flashes in 3 $\frac{1}{2}$ m., and seen from N.b.W. to W.b.N.
BURNHAM	Two..	{ Lower, fixed ..	.....	Elevated 23 ft., seen from N.W.b.W. $\frac{1}{2}$ W. to W.b.N.
FLATHOLM	One..	{ Fixed	16 miles	Elevated 156 ft. above high water.
FLOAT. LIGHT VESS.	One..	{ Revolving .....	.....	Off the English Grounds.
AVON, River	One..	{ Fixed, red	12 miles	Elevated 73 ft.; visible 12 miles.
NASH POINT	Two..	{ Upper, fixed ..	.....	Elevated 167 feet, } Lower, " .. } being 1000 feet asunder.
MUMBLES	One..	{ Fixed	15 miles	Elevated 114 feet, } " 28 feet, } above high-water level.
SWANSEA, Harbour..	One..	{ Fixed, red	9 miles clear weath	Elevated 38 feet; flashes in 20 seconds.
SCARWEATHER SAND	One..	{ Revolving, red ..	.....	Seen from sun-set to sun-rise, sides red, with,
LIGHT VESSEL	One..	{ Revolving .....	.....	" "Helwick" painted on them.
CALDY ISLAND	One..	{ Fixed	19 miles	Upper 192 feet, } above the level of the sea.
ST. ANN'S POINT ..	Two..	{ Upper, fixed ..	19 miles	Lower 159 feet, }
SMALLS	One..	{ Lower, " ..	17 miles .....	.....

TIDE TABLES.

EXPLANATION.

The Tides in this work are calculated for Greenwich Mean Time, and the Height for that Tide nearest mid-day at the following places :—

BARNSTAPLE.—*The Bar.*

BRIDGEWATER.—*The Bridge. The Time of high-water at Bridgewater Bar is about 40 minutes earlier. The depth of water at Cumbwitch Pill is 7 to 8 feet more than in the Tables.*

BRISTOL.—*Cumberland Gates. The height at Bathurst Gates is 9 feet 2 inches less than in the Tables.*

BRITON FERRY.—*Neath Bar. At Vale of Neath Railway Wharf, the depth is 8 inches less than in the Tables; at Giants Grave, 2 feet 6 inches less; Crown Works, and Neath Abbey 4 feet 6 inches less; Neath, 5 feet 6 inches less.*

CARDIFF.—*East Dock Sill. At the West Dock, the depth is 3 feet less than in the Tables; at the Glamorganshire Canal, 13 feet less.*

GLOUCESTER.—*Entrance to the Canal at Sharpness Point.*

ILFRACOMBE.—*Pier Head.*

LLANELLY.—*Dock Gates. At Burry Bar the depth of water is 8 feet more than in the Tables.*

NEWPORT.—*Dock Gates, which are about 40 feet above the bed of the river.*

MILFORD HAVEN.—*The heights are the rise above low-water at spring tides. The time at St. Ann's Lighthouse, is about 25 minutes earlier.*

SWANSEA.—*Entrance Channel. The depth of water at New Cut Bridge, is about 3 feet, and at Hafod Works 6 feet 6 inches less than in the Tables.*

PHASES OF THE MOON.

Last Quarter . 8th, 9h. 36m. p.m. | First Quarter 23rd, 8h. 54m. p.m.
 New Moon .. 16th, 8h. 36m. p.m. | Full Moon .. 30th, 8h. 28m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Monday..	5 30	5 52	27 6	27 6	7 24	7 48	15 5	15 5	7 4	7 28	29 8	29 8
2	Tuesday..	6 15	6 35	27 9	27 9	8 11	8 31	15 9	15 9	7 51	8 11	30 1	30 1
3	Wednesday	6 58	7 19	27 7	27 7	8 54	9 15	15 6	15 6	8 34	8 55	29 10	29 10
4	Thursday..	7 41	8 02	27 1	27 1	9 36	9 53	14 11	14 11	9 16	9 33	28 10	28 10
5	Friday ..	8 21	8 40	26 6	26 6	10 12	10 28	14 2	14 2	9 52	10 8	27 10	27 10
6	Saturday..	8 57	9 15	25 6	25 6	10 44	10 59	12 11	12 11	10 24	10 39	25 11	25 11
7	Sunday ..	9 33	9 50	24 6	24 6	11 14	11 30	11 8	11 8	10 54	11 10	24 0	24 0
8	Monday..	10 9	10 27	23 5	23 5	11 48	..	10 4	10 4	11 28	11 48	22 2	22 2
9	Tuesday..	10 49	11 14	22 4	22 4	0 8	0 33	8 11	8 11	..	0 13	20 2	20 2
10	Wednesday	11 43	..	21 8	21 8	1 1	1 32	8 0	8 0	0 41	1 12	18 10	18 10
11	Thursday..	0 14	0 53	21 6	21 6	2 6	2 42	7 10	7 10	1 46	2 22	18 7	18 7
12	Friday ..	1 34	2 13	22 2	22 2	3 21	3 58	8 9	8 9	3 1	3 38	19 11	19 11
13	Saturday..	2 48	3 16	23 2	23 2	4 36	5 7	10 0	10 0	4 16	4 47	21 8	21 8
14	Sunday ..	3 43	4 8	24 4	24 4	5 36	6 1	11 5	11 5	5 16	5 41	23 9	23 9
15	Monday..	4 32	4 56	25 6	25 6	6 28	6 50	12 11	12 11	6 8	6 30	25 11	25 11
16	Tuesday..	5 19	5 41	25 11	25 11	7 13	7 36	13 5	13 5	6 53	7 16	26 8	26 8
17	Wednesday	6 1	6 20	26 9	26 9	7 58	8 16	14 6	14 6	7 38	7 56	28 2	28 2
18	Thursday..	6 40	6 58	27 4	27 4	8 36	8 54	15 2	15 2	8 16	8 34	29 4	29 4
19	Friday ..	7 17	7 37	27 6	27 6	9 13	9 32	15 5	15 5	8 53	9 12	29 8	29 8
20	Saturday..	7 58	8 19	27 6	27 6	9 51	10 10	15 5	15 5	9 31	9 50	29 8	29 8
21	Sunday ..	8 41	8 59	27 0	27 0	10 28	10 47	14 9	14 9	10 8	10 27	28 8	28 8
22	Monday..	9 20	9 42	26 3	26 3	11 4	11 23	13 10	13 10	10 44	11 3	27 4	27 4
23	Tuesday..	10 4	10 25	25 3	25 3	11 44	..	12 7	12 7	11 24	11 45	25 6	25 6
24	Wednesday	10 49	11 19	24 1	24 1	0 5	0 33	11 2	11 2	..	0 13	23 4	23 4
25	Thursday..	11 55	..	23 3	23 3	1 6	1 46	10 1	10 1	0 46	1 26	21 10	21 10
26	Friday ..	0 36	1 19	23 3	23 3	2 26	3 6	10 1	10 1	2 6	2 46	21 10	21 10
27	Saturday..	2 3	2 44	24 1	24 1	3 48	4 31	11 2	11 2	3 28	4 11	23 4	23 4
28	Sunday ..	3 17	3 50	25 3	25 3	5 9	5 44	12 7	12 7	4 49	5 24	25 6	25 6
29	Monday..	4 22	4 51	26 3	26 3	6 16	6 45	13 10	13 10	5 56	6 25	27 4	27 4
30	Tuesday..	5 17	5 41	26 9	26 9	7 11	7 36	14 6	14 6	6 51	7 16	28 2	28 2
31	Wednesday	6 1	6 22	27 4	27 4	7 58	8 18	15 2	15 2	7 38	7 58	29 4	29 4

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m — Bridgewater, *sub.* 12m. — Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 8th, 9h. 36m. p.m. | First Quarter. 23rd, 8h. 54m. p.m.
 New Moon .. 16th, 8h. 36m. p.m. | Full Moon .. 30th, 8h. 28m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Monday..	6	5	6	27	21	11	6	56	7	20	30	4
2	Tuesday..	6	50	7	10	22	3	7	43	8	3	30	9
3	Wednesday	7	38	7	54	22	0	8	26	8	47	30	6
4	Thursday..	8	16	8	35	21	5	9	8	9	25	29	8
5	Friday ..	8	56	9	15	20	8	9	44	10	0	28	9
6	Saturday..	9	32	9	50	19	5	10	16	10	31	27	2
7	Sunday ..	10	8	10	25	18	2	10	46	11	2	25	6
8	Monday..	10	44	11	2	16	10	11	20	11	40	23	11
9	Tuesday..	11	24	11	49	15	5	..	0	5	22	3	0
10	Wednesday	..	0	18	14	6	0	33	1	4	21	1	1
11	Thursday..	0	49	1	28	14	4	1	38	2	14	20	10
12	Friday ..	2	9	2	48	15	3	2	53	3	30	22	0
13	Saturday..	3	23	3	51	16	6	4	8	4	39	23	6
14	Sunday ..	4	18	4	43	17	11	5	8	5	33	25	3
15	Monday..	5	7	5	31	19	5	6	0	6	22	27	2
16	Tuesday..	5	54	6	16	19	11	6	45	7	8	27	10
17	Wednesday	6	36	6	55	21	0	7	30	7	48	29	1
18	Thursday..	7	15	7	33	21	8	8	8	8	26	30	0
19	Friday ..	7	52	8	12	21	11	8	45	9	4	30	4
20	Saturday..	8	33	8	54	21	11	9	23	9	42	30	4
21	Sunday ..	9	16	9	34	21	3	10	0	10	19	29	6
22	Monday..	9	55	10	17	20	4	10	36	10	55	28	4
23	Tuesday..	10	39	11	0	19	1	11	16	11	37	26	9
24	Wednesday	11	24	11	54	17	8	..	0	5	24	11	0
25	Thursday..	..	0	30	16	7	0	38	1	18	23	8	1
26	Friday ..	1	11	1	54	16	7	1	58	2	38	23	8
27	Saturday..	2	38	3	19	17	8	3	20	4	3	24	11
28	Sunday ..	3	52	4	25	19	1	4	41	5	16	26	9
29	Monday..	4	57	5	26	20	4	5	48	6	17	28	4
30	Tuesday..	5	52	6	16	21	0	6	43	7	8	29	1
31	Wednesday	6	36	6	57	21	8	7	30	7	50	30	0

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 8th, 9h. 36m. p.m. | First Quarter. 23rd, 8h. 54m. p.m.
 New Moon .. 16th, 8h. 36m. p.m. | Full Moon .. 30th, 8h. 28m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.						Llanelly.						Milford Haven.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Monday..	5	40	6	2	21	4	6	15	6	37	21	10	6	15	6	37	21	0
2	Tuesday..	6	25	6	45	21	7	7	0	7	20	22	1	7	0	7	20	21	3
3	Wednesdy	7	8	7	29	21	5	7	48	8	4	21	11	7	48	8	4	21	1
4	Thursday..	7	51	8	10	20	10	8	26	8	45	21	4	8	26	8	45	20	7
5	Friday ..	8	31	8	50	20	2	9	6	9	25	20	8	9	6	9	25	20	0
6	Saturday..	9	7	9	25	19	1	9	42	10	0	19	7	9	42	10	0	19	0
7	Sunday ..	9	43	10	0	18	0	10	18	10	35	18	6	10	18	10	35	18	0
8	Monday..	10	19	10	37	16	10	10	54	11	12	17	4	10	54	11	12	16	11
9	Tuesday..	10	59	11	24	15	8	11	34	11	59	16	2	11	34	11	59	15	10
10	Wednesday	11	53	..	14	10	..	..	0	28	15	4	..	..	0	28	15	2	..
11	Thursday..	0	24	1	3	14	8	0	59	1	38	15	2	0	59	1	38	15	0
12	Friday ..	1	44	2	23	15	6	2	19	2	58	16	0	2	19	2	58	15	8
13	Saturday..	2	58	3	26	16	7	3	33	4	1	17	1	3	33	4	1	16	8
14	Sunday ..	3	53	4	18	17	10	4	28	4	53	18	4	4	28	4	53	17	10
15	Monday..	4	42	5	6	19	1	5	17	5	41	19	7	5	17	5	41	19	0
16	Tuesday..	5	29	5	51	19	7	6	4	6	26	20	1	6	4	6	26	19	5
17	Wednesday	6	11	6	30	20	6	6	46	7	5	21	0	6	46	7	5	20	3
18	Thursday..	6	50	7	8	21	1	7	25	7	43	21	7	7	25	7	43	20	10
19	Friday ..	7	27	7	47	21	4	8	2	8	22	21	10	8	2	8	22	21	0
20	Saturday..	8	8	8	29	21	4	8	43	9	4	21	10	8	43	9	4	21	0
21	Sunday ..	8	51	9	9	20	9	9	26	9	44	21	3	9	26	9	44	20	6
22	Monday..	9	30	9	52	19	11	10	5	10	27	20	5	10	5	10	27	19	9
23	Tuesday..	10	14	10	35	18	10	10	49	11	10	19	4	10	49	11	10	18	9
24	Wednesday	10	59	11	29	17	7	11	34	..	18	1	11	34	..	17	7	..	..
25	Thursday..	..	0	0	5	16	8	0	4	0	40	17	2	0	4	0	40	16	9
26	Friday ..	0	46	1	29	16	8	1	21	2	4	17	2	1	21	2	4	16	9
27	Saturday..	2	13	2	54	17	7	2	48	3	29	18	1	2	48	3	29	17	7
28	Sunday ..	3	27	4	0	18	10	4	2	4	35	19	4	4	2	4	35	18	9
29	Monday..	4	32	5	1	19	11	5	7	5	36	20	5	5	7	5	36	19	9
30	Tuesday..	5	27	5	51	20	6	6	2	6	26	21	0	6	2	6	26	20	3
31	Wednesdy	6	11	6	32	21	1	6	46	7	7	21	7	6	46	7	7	20	10

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub* 16m.—Llanelly, *sub* 16m.—Milford Haven, *sub* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter.. 8th, 9h. 36m. p.m. | First Quarter. 23rd, 8h. 54m. p.m.
 New Moon .. 16th, 8h. 36m. p.m. | Full Moon .. 30th, 8h. 28m. p.m.

W.	Newport.					Swansea.					Liverpool.				London.			
	Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.	
	H.	M.	H.	M.	P. I.	H.	M.	H.	M.	P. I.	H.	M.	H.	M.	H.	M.	H.	M.
Mo	7	4	7	28	29 11	6	5	6	27	22 11	11	15	11	38	1	38	2	4
Tu	7	51	8	11	30 4	6	50	7	10	23 3	12	0	..	..	2	31	2	53
Wd	8	34	8	55	30 1	7	38	7	54	23 0	0	20	0	44	3	15	3	35
Th	9	16	9	33	29 1	8	16	8	35	22 5	1	6	1	28	3	57	4	18
Fri	9	52	10	8	28 1	8	56	9	15	21 8	1	46	2	6	4	40	4	58
Sat	10	24	10	39	26 3	9	32	9	50	20 5	2	25	2	43	5	19	5	38
Sun	10	54	11	10	24 4	10	8	10	25	19 2	3	2	3	21	5	57	6	17
Mo	11	28	11	48	22 7	10	44	11	2	17 10	3	40	4	2	6	37	6	57
Tu	..	..	0	13	20 7	11	24	11	49	16 5	4	25	4	54	7	19	7	42
Wd	0	41	1	12	19 3	..	..	0	18	15 6	5	26	6	0	8	10	8	42
Th	1	46	2	22	19 0	0	49	1	28	15 4	6	39	7	15	9	16	9	49
Fri	3	1	3	38	20 3	2	9	2	48	16 3	7	51	8	25	10	24	11	2
Sat	4	16	4	47	22 1	3	23	3	51	17 6	8	56	9	20	11	37	..	..
Sun	5	16	5	41	24 0	4	18	4	43	18 11	9	42	10	3	0	9	0	34
Mo	6	8	6	30	26 3	5	7	5	31	20 5	10	25	10	43	0	57	1	19
Tu	6	53	7	16	27 1	5	54	6	16	20 11	11	5	11	26	1	42	2	1
Wd	7	38	7	56	28 5	6	36	6	55	22 0	11	47	..	..	2	21	2	42
Th	8	16	8	34	29 7	7	15	7	33	22 8	0	6	0	26	3	2	3	20
Fri	8	53	9	12	29 11	7	52	8	12	22 11	0	44	1	4	3	39	3	57
Sat	9	31	9	50	29 11	8	33	8	54	22 11	1	24	1	44	4	16	4	36
Sun	10	8	10	27	28 11	9	16	9	34	22 3	2	4	2	25	4	56	5	17
Mo	10	44	11	3	27 8	9	55	10	17	21 4	2	45	3	7	5	38	5	59
Tu	11	24	11	45	25 10	10	39	11	0	20 1	3	32	3	56	6	23	6	48
Wd	..	..	0	13	23 8	11	24	11	54	18 8	4	22	4	54	7	13	7	39
Th	0	46	1	26	22 3	..	..	0	30	17 7	5	31	6	16	8	10	8	48
Fri	2	6	2	46	22 3	1	11	1	54	17 7	6	59	7	38	9	29	10	9
Sat	3	28	4	11	23 8	2	38	3	19	18 8	8	16	8	52	10	48	11	28
Sun	4	49	5	24	25 10	3	52	4	25	20 1	9	21	9	49	..	..	0	5
Mo	5	56	6	25	27 8	4	57	5	26	21 4	10	15	10	39	0	35	1	4
Tu	6	51	7	16	28 5	5	52	6	16	22 0	11	3	11	26	1	32	1	57
Wd	7	38	7	58	29 7	6	36	6	57	22 8	11	47	..	..	2	19	2	42

The above are in Greenwich Time, if local Mean Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter . 7th, 7h. 39m. p.m. | First Quarter. 21st, 4h. 47m. a.m.
 New Moon .. 14th, 10h. 12m. a.m. | Full Moon .. 28th, 11h. 52m. a.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday..	6	42	7	0	27	6	8	38	8	56	15	5
2	Friday ..	7	17	7	33	27	5	9	13	9	28	15	3
3	Saturday..	7	53	8	10	26	11	9	46	10	2	14	8
4	Sunday ..	8	27	8	45	26	3	10	17	10	32	13	10
5	Monday..	8	59	9	15	25	3	10	47	10	59	12	7
6	Tuesday..	9	31	9	49	24	2	11	13	11	31	11	3
7	Wednesday	10	6	10	25	23	0	11	46	..	9	9	11
8	Thursday..	10	47	11	14	21	10	0	5	0	31	8	4
9	Friday ..	11	46	..	..	21	4	1	1	1	36	7	7
10	Saturday..	0	26	1	9	21	3	2	17	2	57	7	6
11	Sunday ..	1	53	2	35	22	3	3	38	4	21	8	10
12	Monday..	3	11	3	39	23	9	5	1	5	31	10	9
13	Tuesday..	4	5	4	29	25	4	5	58	6	23	12	8
14	Wednesday	4	54	5	18	26	8	6	48	7	12	14	4
15	Thursday..	5	39	5	59	27	3	7	34	7	56	15	1
16	Friday ..	6	19	6	41	28	2	8	15	8	37	16	3
17	Saturday..	6	59	7	19	28	8	8	55	9	15	16	10
18	Sunday ..	7	40	8	1	28	7	9	35	9	53	16	9
19	Monday..	8	21	8	43	28	1	10	12	10	31	16	2
20	Tuesday..	9	3	9	25	27	1	10	49	11	7	14	11
21	Wednesday	9	45	10	7	25	9	11	26	11	47	13	3
22	Thursday..	10	31	10	58	24	2	..	0	12	11	3	11
23	Friday ..	11	30	..	..	22	10	0	44	1	19	9	7
24	Saturday..	0	11	1	0	22	6	2	3	2	48	9	2
25	Sunday ..	1	46	2	30	23	3	3	32	4	17	10	1
26	Monday..	3	8	3	43	24	6	4	59	5	36	11	8
27	Tuesday..	4	11	4	41	25	9	6	5	6	33	13	3
28	Wednesday	5	2	5	24	26	9	6	56	7	19	14	6

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 7th, 7h. 39m. p.m. | First Quarter. 21st, 4h. 47m. a.m.
 New Moon .. 14th, 10h. 12m. a.m. | Full Moon .. 28th, 11h. 52m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.						Cardiff.						Gloucester.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday.	7	17	7	35	21	11	8	10	8	28	30	4	9	3	9	21	28	5
2	Friday ..	7	52	8	8	21	10	8	45	9	0	30	2	9	38	9	53	28	3
3	Saturday..	8	28	8	45	21	2	9	18	9	34	29	5	10	11	10	27	27	3
4	Sunday ..	9	2	9	20	20	4	9	49	10	4	28	4	10	42	10	57	25	11
5	Monday..	9	34	9	50	19	1	10	19	10	31	26	9	11	12	11	24	23	11
6	Tuesday..	10	6	10	24	17	9	10	45	11	2	25	0	11	38	11	55	21	9
7	Wednesday	10	41	11	0	16	3	11	18	11	37	23	3	..	0	11	19	7	7
8	Thursday.	11	22	11	49	14	10	..	0	3	21	5	0	0	30	0	56	17	3
9	Friday ..	..	0	21	14	1	0	0	33	1	8	20	7	1	26	2	1	16	3
10	Saturday..	1	1	1	44	14	0	1	49	2	29	20	6	2	42	3	22	16	1
11	Sunday ..	2	28	3	10	15	4	3	10	3	53	22	1	4	3	4	46	18	2
12	Monday..	3	46	4	14	17	3	4	33	5	4	24	5	5	26	5	57	21	0
13	Tuesday..	4	40	5	4	19	2	5	30	5	55	26	11	6	23	6	48	24	1
14	Wednesday	5	29	5	53	20	10	6	20	6	44	29	0	7	13	7	37	26	9
15	Thursday.	6	14	6	34	21	7	7	6	7	28	29	11	7	59	8	21	27	11
16	Friday ..	6	54	7	16	22	9	7	47	8	9	31	4	8	40	9	2	29	8
17	Saturday..	7	34	7	54	23	4	8	27	8	47	32	0	9	20	9	40	30	7
18	Sunday ..	8	15	8	36	23	3	9	7	9	25	31	11	10	0	10	18	30	5
19	Monday..	8	56	9	18	22	8	9	44	10	3	31	3	10	37	10	56	29	7
20	Tuesday..	9	38	10	0	21	5	10	21	10	39	29	8	11	14	11	32	27	7
21	Wednesday	10	20	10	42	19	9	10	58	11	19	27	6	11	51	..	24	11	11
22	Thursday.	11	6	11	33	17	9	11	44	..	25	0	0	0	11	0	37	21	9
23	Friday ..	..	0	5	16	1	0	0	16	0	51	23	0	1	9	1	44	19	3
24	Saturday .	0	46	1	34	15	8	1	35	2	20	22	6	2	28	3	13	18	7
25	Sunday ..	2	3	3	5	16	7	3	4	3	49	23	8	3	57	4	42	20	1
26	Monday..	3	43	4	18	18	2	4	31	5	8	25	6	5	24	6	1	22	5
27	Tuesday..	4	46	5	16	19	9	5	37	6	5	27	6	6	30	6	58	24	11
28	Wednesday	5	37	5	59	21	0	6	28	6	51	29	1	7	21	7	44	26	11

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter.. 7th, 7h. 39m. p.m. | First Quarter. 21st, 4h. 47m. a.m.
 New Moon .. 14th, 10h. 12m. a.m. | Full Moon .. 28th, 11h. 52m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday..	6	52	7	10	21	4	7	27	7	45	21	0
2	Friday ..	7	27	7	43	21	3	8	2	8	18	20	11
3	Saturday..	8	3	8	20	20	8	8	38	8	55	20	5
4	Sunday ..	8	37	8	55	19	11	9	12	9	30	19	9
5	Monday..	9	9	9	25	18	10	9	44	10	0	18	9
6	Tuesday..	9	41	9	59	17	8	10	16	10	34	17	8
7	Wednesdy	10	16	10	35	16	4	10	51	11	10	16	6
8	Thursday.	10	57	11	24	15	1	11	32	11	59	15	4
9	Friday ..	11	56	..	14	6		..	0	31	15	0	
10	Saturday..	0	36	1	19	14	5	1	11	1	54	14	9
11	Sunday ..	2	3	2	45	15	7	2	38	3	20	15	9
12	Monday..	3	21	3	49	17	3	3	56	4	24	17	3
13	Tuesday..	4	15	4	39	18	11	4	50	5	14	18	10
14	Wednesdy	5	4	5	28	20	4	5	39	6	3	20	2
15	Thursday.	5	49	6	9	21	0	6	24	6	44	21	6
16	Friday ..	6	29	6	51	22	0	7	4	7	26	22	6
17	Saturday..	7	9	7	29	22	7	7	44	8	4	22	1
18	Sunday ..	7	50	8	11	22	6	8	25	8	46	22	0
19	Monday..	8	31	8	53	21	11	9	6	9	28	21	5
20	Tuesday..	9	13	9	35	20	10	9	48	10	10	20	4
21	Wednesdy	9	55	10	17	19	5	10	30	10	52	19	11
22	Thursday.	10	41	11	8	17	8	11	16	11	43	17	2
23	Friday ..	11	40	..	16	2		..	0	15	16	8	
24	Saturday .	0	21	1	9	15	10	0	56	1	44	16	4
25	Sunday ..	1	56	2	40	16	8	2	13	3	15	16	2
26	Monday..	3	18	3	53	18	0	3	53	4	28	18	6
27	Tuesday..	4	21	4	50	19	5	4	56	5	26	19	11
28	Wednesdy	5	12	5	34	20	6	5	47	6	9	20	0

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 7th, 7h. 39m. p.m. | First Quarter. 21st, 4h. 47m. a.m.
 New Moon .. 14th, 10h. 12m. a.m. | Full Moon .. 28th, 11h. 52m. a.m.

M.	W.	Newport.						Swansea.						Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Morn.		Even.	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.	H.	M.
1	Th	8	18	8	36	29	11	7	17	7	35	22	11	0	8	0	28	3	2	3	22
2	Fri	8	53	9	8	29	9	7	52	8	8	22	10	0	46	1	4	3	41	3	59
3	Sat	9	26	9	42	28	9	8	28	8	45	22	2	1	20	1	39	4	16	4	32
4	Sun	9	57	10	12	27	8	9	2	9	20	21	4	1	55	2	12	4	51	5	8
5	Mo	10	27	10	39	25	10	9	34	9	50	20	1	2	30	2	45	5	25	5	43
6	Tu	10	53	11	10	23	9	10	6	10	24	18	9	3	2	3	19	5	59	6	17
7	Wd	11	26	11	45	21	10	10	41	11	0	17	3	3	39	3	59	6	35	6	56
8	Th	..	0	11	19	7	7	11	22	11	49	15	10	4	22	4	52	7	16	7	39
9	Fri	0	41	1	16	18	8	..	0	21	15	1	1	5	26	6	5	8	8	8	42
10	Sat	1	57	2	37	18	7	1	1	1	44	15	0	6	50	7	30	9	20	10	0
11	Sun	3	18	4	1	20	5	2	28	3	10	16	4	8	7	8	44	10	39	11	19
12	Mo	4	41	5	12	23	1	3	46	4	14	18	3	9	15	9	39	11	57	..	..
13	Tu	5	38	6	3	26	0	4	40	5	4	20	2	10	0	10	21	0	29	0	54
14	Wd	6	28	6	52	28	4	5	29	5	53	21	10	10	41	11	4	1	16	1	38
15	Th	7	14	7	36	29	5	6	14	6	34	22	7	11	24	11	45	1	59	2	20
16	Fri	7	55	8	17	31	1	6	54	7	16	23	9	..	0	5	2	40	3	0	0
17	Sat	8	35	8	55	31	10	7	34	7	54	24	4	0	27	0	45	3	19	3	40
18	Sun	9	15	9	33	31	8	8	15	8	36	24	3	1	6	1	27	3	58	4	18
19	Mo	9	52	10	11	30	11	8	56	9	18	23	8	1	47	2	6	4	39	4	59
20	Tu	10	29	10	47	29	1	9	38	10	0	22	5	2	28	2	49	5	19	5	41
21	Wd	11	6	11	27	26	9	10	20	10	42	20	9	3	12	3	34	6	4	6	28
22	Th	11	52	..	23	9	9	11	6	11	33	18	9	4	0	4	30	6	51	7	17
23	Fri	0	24	0	59	21	6	..	0	5	17	1	1	5	6	5	46	7	47	8	22
24	Sat	1	43	2	28	20	11	0	46	1	34	16	8	6	35	7	21	9	3	9	46
25	Sun	3	12	3	57	22	3	2	3	3	5	17	7	8	2	8	40	10	30	11	13
26	Mo	4	39	5	16	24	4	3	43	4	18	19	2	9	13	9	42	11	53	..	..
27	Tu	5	45	6	13	26	9	4	46	5	16	20	9	10	6	10	28	0	27	0	57
28	Wd	6	36	6	59	28	5	5	37	5	59	22	0	10	49	11	10	1	22	1	46

The above are in Greenwich Time, if local Mean Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 9th, 3h 52m. p.m. | First Quarter. 23rd, 1h. 2m. p.m.
 New Moon .. 16th, 9h. 36m. p.m. | Full Moon .. 30th, 4h. 31m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday.	5	44	6	3	27	1	7	40	8	0	14	11
2	Friday ..	6	21	6	36	27	6	8	17	8	32	15	5
3	Saturday..	6	53	7	8	27	7	8	49	9	4	15	6
4	Sunday ..	7	25	7	41	27	3	9	20	9	36	15	1
5	Monday..	7	58	8	11	26	11	9	51	10	3	14	8
6	Tuesday..	8	26	8	43	25	10	10	16	10	31	13	4
7	Wednesday	8	58	9	13	24	8	10	46	10	58	11	10
8	Thursday.	9	33	9	51	23	7	11	15	11	31	10	6
9	Friday ..	10	12	10	34	22	5	11	52	..	9	1	11
10	Saturday..	11	2	11	35	21	4	0	16	0	48	7	7
11	Sunday ..	..	0	15	21	1	1	1	24	2	7	7	4
12	Monday..	1	0	1	45	21	10	2	49	3	31	8	4
13	Tuesday..	2	25	3	0	23	4	4	11	4	50	10	2
14	Wednesday	3	31	3	58	25	3	5	24	5	51	12	7
15	Thursday.	4	22	4	49	27	0	6	16	6	43	14	9
16	Friday ..	5	12	5	33	27	9	7	7	7	27	15	9
17	Saturday..	5	53	6	13	28	10	7	49	8	10	17	1
18	Sunday ..	6	36	6	58	29	4	8	31	8	54	17	8
19	Monday..	7	19	7	40	29	3	9	15	9	35	17	7
20	Tuesday..	8	3	8	26	28	7	9	55	10	16	16	9
21	Wednesday	8	48	9	8	27	4	10	36	10	53	15	2
22	Thursday.	9	29	9	53	25	9	11	11	11	34	13	3
23	Friday ..	10	18	10	45	23	6	11	58	..	10	5	11
24	Saturday..	11	19	11	57	22	7	0	28	1	6	9	3
25	Sunday ..	..	0	4	2	22	2	1	48	2	32	8	9
26	Monday..	1	29	2	11	22	11	3	15	3	57	9	8
27	Tuesday..	2	48	3	19	24	2	4	36	5	11	11	3
28	Wednesday	3	49	4	15	25	3	5	42	6	8	12	7
29	Thursday.	4	37	4	57	26	8	6	31	6	51	14	4
30	Friday ..	5	16	5	35	27	6	7	10	7	31	15	5
31	Saturday..	5	52	6	7	27	1	7	48	8	4	14	11

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter.. 9th, 3h. 52m. p.m. | First Quarter. 23rd, 1h. 2m. p.m.
 New Moon .. 16th, 9h. 36m. p.m. | Full Moon .. 30th, 4h. 31m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday.	6	19	6	38	21	5	7	12	7	32	29	8
2	Friday ..	6	56	7	11	21	11	7	49	8	4	30	4
3	Saturday..	7	28	7	43	22	0	8	21	8	36	30	6
4	Sunday ..	8	0	8	16	21	7	8	52	9	8	29	11
5	Monday..	8	33	8	46	21	2	9	23	9	35	29	5
6	Tuesday..	9	1	9	18	19	10	9	48	10	3	27	8
7	Wednesday	9	33	9	48	18	4	10	18	10	30	25	10
8	Thursday.	10	8	10	26	17	0	10	47	11	3	24	2
9	Friday ..	10	47	11	9	15	7	11	24	11	48	22	4
10	Saturday..	11	37	..	14	1		..	0	20	20	7	
11	Sunday ..	0	10	0	50	13	10	0	56	1	39	20	3
12	Monday..	1	35	2	20	14	10	2	21	3	3	21	5
13	Tuesday..	3	0	3	35	16	8	3	43	4	22	23	9
14	Wednesday	4	6	4	33	19	1	4	56	5	23	26	9
15	Thursday.	4	7	5	24	21	3	5	48	6	15	29	6
16	Friday ..	5	47	6	8	22	3	6	39	6	59	30	9
17	Saturday..	6	28	6	48	23	7	7	21	7	42	32	4
18	Sunday ..	7	11	7	33	24	2	8	4	8	26	33	2
19	Monday..	7	54	8	15	24	1	8	47	9	7	33	0
20	Tuesday..	8	38	9	1	23	3	9	27	9	48	31	11
21	Wednesday	9	23	9	43	21	8	10	8	10	25	30	0
22	Thursday.	10	4	10	28	19	9	10	43	11	6	27	6
23	Friday ..	10	53	11	20	16	11	11	30	12	0	24	0
24	Saturday .	11	54	..	15	9		..	0	38	22	7	
25	Sunday ..	0	32	1	17	15	3	1	20	2	4	22	0
26	Monday..	2	4	2	46	16	2	2	47	3	29	23	2
27	Tuesday..	3	23	3	54	17	9	4	8	4	43	25	0
28	Wednesday	4	24	4	50	19	1	5	14	5	40	26	9
29	Thursday.	5	12	5	32	20	10	6	3	6	23	29	0
30	Friday ..	5	51	6	10	21	11	6	42	7	2	30	4
31	Saturday..	6	27	6	42	21	5	7	20	7	36	29	8

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter . 9th, 3h. 52m. p.m. | First Quarter. 23rd, 1h. 2m. p.m.
 New Moon .. 16th, 9h. 36m. p.m. | Full Moon .. 30th, 4h. 31m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.					Llanelly.					Milford Haven.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday.	5	54	6	13	20	10	6	29	6	48	21	4	6	29	6	48	20	7
2	Friday ..	6	31	6	46	21	4	7	6	7	21	21	10	7	6	7	21	21	0
3	Saturday..	7	3	7	18	21	5	7	38	7	53	21	11	7	38	7	53	21	1
4	Sunday ..	7	35	7	51	21	0	8	10	8	26	21	6	8	10	8	26	20	9
5	Monday..	8	8	8	21	20	8	8	43	8	56	21	2	8	43	8	56	20	5
6	Tuesday..	8	36	8	53	19	6	9	11	9	28	20	0	9	11	9	28	19	4
7	Wednesdy	9	8	9	23	18	2	9	43	9	58	18	8	9	43	9	58	18	2
8	Thursday.	9	43	10	1	17	0	10	18	10	36	17	6	10	18	10	36	17	1
9	Friday ..	10	22	10	44	15	9	10	57	11	19	16	3	10	57	11	19	15	11
10	Saturday..	11	12	11	45	14	6	11	47	..	15	0	11	47	..	14	10		
11	Sunday ..	..	0	25	14	3		0	20	1	0	14	9	0	20	1	0	14	7
12	Monday..	1	10	1	55	15	1	1	45	2	30	15	7	1	45	2	30	15	4
13	Tuesday..	2	35	3	10	16	9	3	10	3	45	17	3	3	10	3	45	16	10
14	Wednesdy	3	41	4	8	18	10	4	16	4	43	19	4	4	16	4	43	18	9
15	Thursday.	4	32	4	59	20	9	5	7	5	34	21	3	5	7	5	34	20	6
16	Friday ..	5	22	5	43	21	7	5	57	6	18	22	1	5	57	6	18	21	3
17	Saturday..	6	3	6	23	22	9	6	38	6	58	23	3	6	38	6	58	22	3
18	Sunday ..	6	46	7	8	23	3	7	21	7	43	23	9	7	21	7	43	22	10
19	Monday..	7	29	7	50	23	2	8	4	8	25	23	8	8	4	8	25	22	9
20	Tuesday..	8	13	8	36	22	6	8	48	9	11	23	0	8	48	9	11	22	1
21	Wednesdy	8	58	9	18	21	1	9	33	9	53	21	7	9	33	9	53	20	10
22	Thursday.	9	39	10	3	19	5	10	14	10	38	19	11	10	14	10	38	19	3
23	Friday ..	10	28	10	55	16	11	11	3	11	30	17	5	11	3	11	30	17	0
24	Saturday..	11	29	..	15	11		..	0	4	16	5		..	0	4	16	1	
25	Sunday ..	0	7	0	52	15	6	0	42	1	27	16	0	0	42	1	27	15	8
26	Monday..	1	39	2	21	16	3	2	14	2	56	16	9	2	14	2	56	16	5
27	Tuesday..	2	58	3	29	17	8	3	33	4	4	18	2	3	33	4	3	17	8
28	Wednesdy	3	59	4	25	18	10	4	34	5	0	19	4	4	34	5	0	18	9
29	Thursday.	4	47	5	7	20	4	5	22	5	42	20	10	5	22	5	42	20	2
30	Friday ..	5	26	5	45	21	4	6	1	6	20	21	10	6	1	6	20	21	0
31	Saturday..	6	2	6	17	20	10	6	37	6	52	21	4	6	37	6	52	20	7

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter.. 9th, 3h. 52m. p.m. | First Quarter. 23rd, 1h. 2m. p.m.
 Moon .. 16th, 9h. 36m. p.m. | Full Moon .. 30th, 4h. 31m. p.m.

	Newport.					Swansea.					Liverpool.				London.			
	Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.	
	H.	M.	H.	M.	F.	H.	M.	H.	M.	F.	H.	M.	H.	M.	H.	M.	H.	M.
1	7	20	7	40	29	1	6	19	6	38	22	5	11	29	11	49	2	6
2	7	57	8	12	29	11	6	56	7	11	22	11	..	0	7	2	45	3
3	8	29	8	44	30	1	7	28	7	43	23	0	0	22	0	39	3	21
4	9	0	9	16	29	5	8	0	8	16	22	7	0	55	1	12	3	52
5	9	31	9	43	28	9	8	33	8	46	22	2	1	28	1	44	4	24
6	9	56	10	11	26	11	9	1	9	18	20	10	1	56	2	11	4	56
7	10	26	10	38	24	9	9	33	9	48	19	4	2	28	2	44	5	24
8	10	55	11	11	22	9	10	8	10	26	18	0	3	0	3	21	5	58
9	11	32	11	56	20	9	10	47	11	9	16	7	3	41	4	6	6	37
10	..	0	28	18	8	11	11	37	..	15	1	4	4	34	5	11	7	23
11	1	4	1	47	18	3	0	10	0	50	14	10	5	51	6	40	8	27
12	2	29	3	11	19	7	1	35	2	20	15	10	7	22	8	1	9	50
13	3	51	4	30	22	5	3	0	3	35	17	8	8	35	9	6	11	12
14	5	4	5	31	25	10	4	6	4	33	20	1	9	33	9	54	..	0
15	5	56	6	23	28	11	4	57	5	24	22	3	10	15	10	37	0	47
16	6	47	7	7	30	4	5	47	6	8	23	3	10	59	11	18	1	32
17	7	29	7	50	32	2	6	28	6	48	24	7	11	39	11	59	2	15
18	8	12	8	34	33	2	7	11	7	33	25	2	..	0	22	2	54	3
19	8	55	9	15	33	0	7	54	8	15	25	1	0	44	1	6	3	36
20	9	35	9	56	31	8	8	38	9	1	24	3	1	27	1	49	4	18
21	10	16	10	33	29	7	9	23	9	43	22	8	2	11	2	34	5	1
22	10	51	11	14	26	9	10	4	10	28	20	9	2	54	3	17	5	47
23	11	38	..	22	8	10	10	53	11	20	17	11	3	44	4	13	6	33
24	0	8	0	46	21	0	11	54	..	16	9	4	4	49	5	31	7	30
25	1	28	2	12	20	3	0	32	1	17	16	3	6	18	7	4	8	48
26	2	55	3	37	21	8	2	4	2	46	17	2	7	47	8	26	10	14
27	4	16	4	51	23	9	3	23	3	54	18	9	8	56	9	23	11	36
28	5	22	5	48	25	10	4	24	4	50	20	1	9	47	10	8	0	9
29	6	11	6	31	28	4	5	12	5	32	21	10	10	27	10	44	1	2
30	6	50	7	10	29	11	5	51	6	10	22	11	11	2	11	20	1	45
31	7	28	7	44	29	1	6	27	6	42	22	5	11	38	11	53	2	18

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 7th, 8h. 41m. a.m. | First Quarter. 21st, 10h. 31m. p.m.
 New Moon .. 14th, 7h. 3m. a.m. | Full Moon .. 29th, 6h. 23m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.	Even.	Height		Morn.	Even.	Height		Morn.	Even.	Height	
		H. M.	H. M.	P.	I.	H. M.	H. M.	P.	I.	H. M.	H. M.	P.	I.
1	Sunday ..	6 24	6 41	27	3	8 20	8 37	15	1	8 0	8 17	29	2
2	Monday..	6 56	7 11	27	1	8 52	9 7	14	11	8 32	8 47	28	10
3	Tuesday..	7 27	7 43	26	7	9 22	9 38	14	3	9 2	9 18	28	0
4	Wednesday	7 59	8 15	25	10	9 52	10 5	13	4	9 32	9 45	26	6
5	Thursday..	8 32	8 48	24	11	10 21	10 36	12	2	10 1	10 16	24	10
6	Friday ..	9 5	9 25	23	10	10 52	11 7	10	10	10 32	10 47	22	10
7	Saturday..	9 45	10 8	22	10	11 26	11 48	9	7	11 6	11 28	21	1
8	Sunday ..	10 33	11 4	21	9	..	0 14	8	2	11 54	..	19	0
9	Monday..	11 38	..	21	5	0 50	1 27	7	9	0 30	1 7	18	6
10	Tuesday..	0 16	0 59	22	0	2 8	2 48	8	6	1 48	2 28	19	6
11	Wednesday	1 42	2 17	23	6	3 28	4 3	10	5	3 8	3 43	22	3
12	Thursday..	2 49	3 19	25	5	4 38	5 11	12	10	4 18	4 51	25	9
13	Friday ..	3 48	4 15	27	2	5 41	6 8	15	0	5 21	5 48	29	0
14	Saturday..	4 36	5 2	28	6	6 30	6 56	16	8	6 10	6 36	31	4
15	Sunday ..	5 27	5 49	28	11	7 22	7 45	17	2	7 2	7 25	32	2
16	Monday..	6 12	6 35	29	6	8 9	8 31	17	11	7 49	8 11	33	2
17	Tuesday..	6 57	7 20	29	4	8 53	9 16	17	8	8 33	8 56	32	11
18	Wednesday	7 45	8 9	28	8	9 38	10 1	16	10	9 18	9 41	31	8
19	Thursday..	8 32	8 55	27	4	10 21	10 42	15	2	10 1	10 22	29	4
20	Friday ..	9 18	9 42	25	9	11 1	11 23	13	3	10 41	11 3	26	4
21	Saturday..	10 7	10 34	24	1	11 47	..	11	2	11 27	11 56	23	4
22	Sunday ..	11 4	11 36	22	9	0 16	0 50	9	6	..	0 30	20	11
23	Monday..	..	0 14	22	2	1 25	2 6	8	9	1 5	1 46	19	11
24	Tuesday..	0 56	1 36	22	7	2 45	3 23	9	3	2 25	3 3	20	7
25	Wednesday	2 13	2 47	23	7	3 58	4 34	10	6	3 38	4 14	22	5
26	Thursday..	3 15	3 38	24	8	5 6	5 31	11	10	4 46	5 11	24	4
27	Friday ..	4 1	4 23	25	6	5 55	6 18	12	11	5 35	5 58	25	11
28	Saturday..	4 45	5 4	26	1	6 38	6 58	13	8	6 18	6 38	27	0
29	Sunday ..	5 19	5 41	26	4	7 17	7 36	13	11	6 57	7 16	27	6
30	Monday..	5 57	6 15	26	8	7 54	8 11	14	4	7 34	7 51	28	1

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 7th, 8h. 41m. a.m. | First Quarter. 21st, 10h. 31m. p.m.
 New Moon .. 14th, 7h. 3m. a.m. | Full Moon .. 29th, 9h. 23m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Sunday ..	6	59	7	16	21	7	7	52	8	9	29	11
2	Monday ..	7	31	7	46	21	5	8	24	8	39	29	8
3	Tuesday ..	8	2	8	18	20	9	8	54	9	10	28	11
4	Wednesday ..	8	34	8	50	19	10	9	24	9	37	27	8
5	Thursday ..	9	7	9	23	18	8	9	53	10	8	26	3
6	Friday ..	9	40	10	0	17	4	10	24	10	39	24	6
7	Saturday ..	10	20	10	43	16	1	10	58	11	20	23	0
8	Sunday ..	11	8	11	39	14	8	11	46	..	21	3	0
9	Monday ..	..	0	13	14	3	0	0	22	0	59	20	9
10	Tuesday ..	0	51	1	34	15	0	1	40	2	20	21	8
11	Wednesday ..	2	17	2	52	16	11	3	0	3	35	24	0
12	Thursday ..	3	24	3	54	19	4	4	10	4	43	27	0
13	Friday ..	4	23	4	50	21	6	5	13	5	40	29	9
14	Saturday ..	5	11	5	37	23	2	6	2	6	28	31	9
15	Sunday ..	6	2	6	24	23	8	6	54	7	17	32	6
16	Monday ..	6	47	7	10	24	5	7	41	8	3	33	5
17	Tuesday ..	7	32	7	55	24	2	8	25	8	48	33	2
18	Wednesday ..	8	20	8	44	23	4	9	10	9	33	32	0
19	Thursday ..	9	7	9	33	21	8	9	53	10	14	30	0
20	Friday ..	9	53	10	17	19	9	10	33	10	55	27	6
21	Saturday ..	10	42	11	9	17	8	11	19	11	48	24	11
22	Sunday ..	11	39	..	16	0	..	..	0	22	22	10	0
23	Monday ..	0	11	0	49	15	3	0	57	1	38	22	0
24	Tuesday ..	1	31	2	11	15	9	2	17	2	55	22	7
25	Wednesday ..	2	48	3	22	17	0	3	30	4	6	24	2
26	Thursday ..	3	50	4	13	18	4	4	38	5	3	25	10
27	Friday ..	4	36	4	58	19	5	5	25	5	50	27	2
28	Saturday ..	5	20	5	39	20	2	6	10	6	30	28	1
29	Sunday ..	5	54	6	16	20	5	6	49	7	8	28	6
30	Monday ..	6	32	6	50	20	10	7	26	7	43	29	0

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter . 7th, 8h. 41m. a.m. | First Quarter 21st, 10h. 31m. p.m.
 New Moon .. 14th, 7h. 3m. a.m. | Full Moon .. 29th, 9h. 23m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.					Llanelly.					Milford Haven.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H. M.	H. M.	F. I.	F. I.		H. M.	H. M.	F. I.	F. I.		H. M.	H. M.	F. I.	F. I.	
1	Sunday ..	6 34	6 51	21 0	21 0		7 9	7 26	21 6	21 6		7 9	7 26	20 9	20 9	
2	Monday..	7 6	7 21	20 10	20 10		7 41	7 56	21 4	21 4		7 41	7 56	20 7	20 7	
3	Tuesday..	7 37	7 53	20 3	20 3		8 12	8 28	20 9	20 9		8 12	8 28	20 1	20 1	
4	Wednesday	8 9	8 25	19 6	19 6		8 44	9 0	20 0	20 0		8 44	9 0	19 4	19 4	
5	Thursday.	8 42	8 58	18 6	18 6		9 17	9 33	19 0	19 0		9 17	9 33	18 5	18 5	
6	Friday ..	9 15	9 35	17 4	17 4		9 50	10 10	17 10	17 10		9 50	10 10	17 4	17 4	
7	Saturday..	9 55	10 18	16 2	16 2		10 30	10 53	16 8	16 8		10 30	10 53	16 4	16 4	
8	Sunday ..	10 43	11 14	15 0	15 0		11 18	11 49	15 6	15 6		11 18	11 49	15 3	15 3	
9	Monday..	11 48	.. 14	7	7		.. 0	23 15	1	1		.. 0	23 14	11	11	
10	Tuesday..	0 26	1 9	15 3	15 3		1 1	1 44	15 9	15 9		1 1	1 44	15 6	15 6	
11	Wednesday	1 52	2 27	16 11	16 11		2 27	3 2	17 5	17 5		2 27	3 2	17 0	17 0	
12	Thursday.	2 59	3 29	19 0	19 0		3 34	4 4	19 6	19 6		3 34	4 4	18 11	18 11	
13	Friday ..	3 58	4 25	20 11	20 11		4 33	5 0	21 5	21 5		4 33	5 0	20 8	20 8	
14	Saturday..	4 46	5 12	22 5	22 5		5 21	5 47	22 11	22 11		5 21	5 47	22 0	22 0	
15	Sunday ..	5 37	5 59	22 10	22 10		6 12	6 34	23 4	23 4		6 12	6 34	22 5	22 5	
16	Monday..	6 22	6 45	23 6	23 6		6 57	7 20	24 0	24 0		6 57	7 20	23 0	23 0	
17	Tuesday..	7 7	7 30	23 3	23 3		7 42	8 5	23 9	23 9		7 42	8 5	22 10	22 10	
18	Wednesday	7 55	8 19	22 7	22 7		8 30	8 54	23 1	23 1		8 30	8 54	22 2	22 2	
19	Thursday.	8 42	9 5	21 1	21 1		9 17	9 43	21 7	21 7		9 17	9 43	20 10	20 10	
20	Friday ..	9 28	9 52	19 5	19 5		10 3	10 27	19 11	19 11		10 3	10 27	19 3	19 3	
21	Saturday..	10 17	10 44	17 7	17 7		10 52	11 19	18 1	18 1		10 52	11 19	17 7	17 7	
22	Sunday ..	11 14	11 46	16 1	16 1		11 49	.. 16	7	7		11 49	.. 16	3	3	
23	Monday..	.. 0	24 15	6	6		0 21	0 59	16 0	16 0		0 21	0 59	15 8	15 8	
24	Tuesday..	1 6	1 46	15 11	15 11		1 41	2 21	16 5	16 5		1 41	2 21	16 1	16 1	
25	Wednesday	2 23	2 57	17 0	17 0		2 58	3 32	17 6	17 6		2 58	3 32	17 1	17 1	
26	Thursday.	3 25	3 48	18 2	18 2		4 0	4 23	18 8	18 8		4 0	4 23	18 2	18 2	
27	Friday ..	4 11	4 33	19 1	19 1		4 46	5 8	19 7	19 7		4 46	5 8	19 0	19 0	
28	Saturday..	4 55	5 14	19 9	19 9		5 30	5 49	20 3	20 3		5 30	5 49	19 7	19 7	
29	Sunday ..	5 29	5 51	20 0	20 0		6 4	6 26	20 6	20 6		6 4	6 26	19 10	19 10	
30	Monday..	6 7	6 25	20 4	20 4		6 42	7 0	20 10	20 10		6 42	7 0	20 2	20 2	

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 7th, 8h. 41m. a.m. | First Quarter. 21st, 10h. 31m. p.m.
 New Moon .. 14th, 7h. 3m. a.m. | Full Moon .. 29th, 9h. 23m. p.m.

M. D.	W. D.	Newport.					Swansea.					Liverpool.				London.					
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.	Morn.		Even.				
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.		
1	Sun	8	0	8	17	29	5	6	59	7	16	22	7	..	0	10	2	53	3	8	
2	Mo	8	32	8	47	29	1	7	31	7	46	22	5	0	27	0	42	3	24	3	40
3	Tu	9	2	9	18	28	3	8	2	8	18	21	9	0	58	1	14	3	55	4	10
4	Wd	9	32	9	45	26	11	8	34	8	50	20	10	1	30	1	45	4	26	4	42
5	Th	10	1	10	16	25	2	9	7	9	23	19	8	1	59	2	17	4	57	5	12
6	Fri	10	32	10	47	23	2	9	40	10	0	18	4	2	34	2	52	5	30	5	47
7	Sat	11	6	11	28	21	6	10	20	10	43	17	1	3	12	3	34	6	7	6	28
8	Sun	11	54	..	19	5	11	8	11	39	15	8	4	1	4	32	6	51	7	18	
9	Mo	0	30	1	7	18	10	..	0	13	15	3	5	13	5	55	7	49	8	29	
10	Tu	1	48	2	28	19	11	0	51	1	34	16	0	6	41	7	21	9	11	9	51
11	Wd	3	8	3	43	22	8	2	17	2	52	17	11	7	58	8	29	10	30	11	9
12	Th	4	18	4	51	26	1	3	24	3	54	20	4	8	57	9	23	11	41	..	..
13	Fri	5	21	5	48	29	3	4	23	4	50	22	6	9	46	10	8	0	10	0	37
14	Sat	6	10	6	36	31	6	5	11	5	37	24	2	10	26	10	49	1	1	1	25
15	Sun	7	2	7	25	32	4	6	2	6	24	24	8	11	13	11	34	1	44	2	6
16	Mo	7	49	8	11	33	6	6	47	7	10	25	5	11	58	..	2	29	2	50	..
17	Tu	8	33	8	56	33	2	7	32	7	55	25	2	0	21	0	43	3	13	3	35
18	Wd	9	18	9	41	31	10	8	20	8	44	24	4	1	7	1	31	3	56	4	19
19	Th	10	1	10	22	29	7	9	7	9	33	22	8	1	54	2	17	4	43	5	7
20	Fri	10	41	11	3	26	9	9	53	10	17	20	9	2	41	3	5	5	30	5	55
21	Sat	11	27	11	56	23	8	10	42	11	9	18	8	3	32	4	0	6	20	6	48
22	Sun	..	0	30	21	4	11	11	39	..	17	0	4	4	34	5	13	7	17	7	51
23	Mo	1	5	1	46	20	3	0	11	0	49	16	3	5	52	6	39	8	29	9	9
24	Tu	2	25	3	3	21	0	1	31	2	11	16	9	7	18	7	53	9	49	10	27
25	Wd	3	38	4	14	22	10	2	48	3	22	18	0	8	25	8	54	11	4	11	37
26	Th	4	46	5	11	24	9	3	50	4	13	19	4	9	19	9	38	..	0	7	..
27	Fri	5	35	5	58	26	3	4	36	4	58	20	5	9	57	10	16	0	33	0	53
28	Sat	6	18	6	38	27	4	5	20	5	39	21	2	10	33	10	51	1	13	1	33
29	Sun	6	57	7	16	27	10	5	54	6	16	21	5	11	8	11	26	1	51	2	8
30	Mo	7	34	7	51	28	4	6	32	6	50	21	10	11	43	12	0	2	24	2	42

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 7th, 9h. 41m. p.m. | First Quarter. 20th, 9h. 57m. a.
 New Moon .. 14th, 2h. 58m. p.m. | Full Moon .. 29th, 1h. 17m. p.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.		
		Morn.		Even	Height	Morn.		Even	Height	Morn.	Even	Height
		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.
1	Tuesday ..	6 31	6 45	27 6		8 27	8 41	15 5		8 7	8 21	29
2	Wednesday ..	7 1	7 18	26 4		8 57	9 14	13 11		8 37	8 54	27
3	Thursday ..	7 33	7 50	25 10		9 28	9 43	13 4		9 8	9 23	26
4	Friday ..	8 8	8 27	25 2		10 0	10 17	12 6		9 40	9 57	25
5	Saturday ..	8 45	9 6	24 4		10 33	10 52	11 5		10 13	10 32	23
6	Sunday ..	9 26	9 48	23 6		11 9	11 29	10 5		10 49	11 9	22
7	Monday ..	10 12	10 38	22 8		11 52	..	9 4		11 32	12 0	20
8	Tuesday ..	11 8	11 39	22 2		0 20	0 54	8 9		..	0 34	19
9	Wednesday ..	..	0 13	22 6		1 28	2 5	9 2		1 8	1 45	20
10	Thursday ..	0 54	1 32	23 7		2 43	3 18	10 6		2 23	2 58	22
11	Friday ..	2 8	2 38	25 3		3 54	4 25	12 7		3 34	4 5	25
12	Saturday ..	3 7	3 36	26 10		4 57	5 29	14 7		4 37	5 9	28
13	Sunday ..	4 5	4 34	28 1		5 57	6 28	16 2		5 37	6 8	30
14	Monday ..	4 58	5 26	28 10		6 53	7 21	17 1		6 33	7 1	32
15	Tuesday ..	5 51	6 16	29 0		7 47	8 12	17 3		7 27	7 52	33
16	Wednesday ..	6 42	7 6	28 10		8 38	9 2	17 1		8 18	8 42	32
17	Thursday ..	7 29	7 53	28 3		9 21	9 46	16 4		9 4	9 26	30
18	Friday ..	8 17	8 42	27 2		10 8	10 30	15 0		9 48	10 10	29
19	Saturday ..	9 4	9 28	25 10		10 50	11 11	13 4		10 30	10 51	26
20	Sunday ..	9 53	10 18	24 3		11 34	11 58	11 4		11 14	11 38	23
21	Monday ..	10 42	11 9	23 2		..	0 25	10 0		..	0 5	21
22	Tuesday ..	4 41	..	22 6		0 56	1 30	9 2		0 36	1 10	20
23	Wednesday ..	0 13	0 45	22 4		2 5	2 35	8 11		1 45	2 15	20
24	Thursday ..	1 20	1 55	22 10		3 7	3 40	9 7		2 47	3 20	21
25	Friday ..	2 26	2 56	23 9		4 12	4 45	10 9		3 52	4 25	22
26	Saturday ..	3 23	3 47	24 6		5 15	5 40	11 8		4 55	5 20	24
27	Sunday ..	4 10	4 32	25 3		6 4	6 26	12 7		5 44	6 6	25
28	Monday ..	4 52	5 12	25 9		6 47	7 7	13 3		6 27	6 47	26
29	Tuesday ..	5 31	5 49	25 11		7 25	7 45	13 5		7 5	7 25	26
30	Wednesday ..	6 6	6 25	26 2		8 3	8 21	13 9		7 43	8 12	27
31	Thursday ..	6 41	6 58	26 2		8 37	8 54	13 9		8 17	8 34	27

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m — Bridgewater, *sub.* 12m. — Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter . 7th, 9h. 41m. p.m. | First Quarter 20th, 9h. 57m. a.m.
 New Moon .. 14th, 2h. 58m. p.m. | Full Moon .. 29th, 1h. 17m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Tuesday..	7	6	7	20	21	11	7	59	8	13	30	4
2	Wednesday	7	36	7	53	20	5	8	29	8	46	28	6
3	Thursday.	8	8	8	25	19	10	9	0	9	1	27	8
4	Friday ..	8	43	9	2	19	0	9	32	9	49	26	7
5	Saturday..	9	20	9	41	17	11	10	5	10	24	25	8
6	Sunday ..	10	1	10	23	16	11	10	41	11	1	24	0
7	Monday..	10	47	11	13	15	10	11	24	11	52	22	9
8	Tuesday..	11	43	..	15	3	..	..	0	26	22	6	0
9	Wednesday	0	14	0	48	15	8	1	0	1	37	22	6
10	Thursday.	1	29	2	7	17	0	2	15	2	50	24	2
11	Friday ..	2	43	3	13	19	1	3	26	3	57	26	9
12	Saturday..	3	42	4	11	21	1	4	29	5	1	29	3
13	Sunday ..	4	40	5	9	22	8	5	29	6	0	31	3
14	Monday..	5	33	6	1	23	7	6	25	5	53	32	4
15	Tuesday..	6	26	6	51	23	9	7	19	7	41	32	7
16	Wednesday	7	17	7	41	23	7	8	10	8	34	32	4
17	Thursday.	8	4	8	28	22	10	8	56	9	18	31	5
18	Friday ..	8	52	9	17	21	6	9	40	10	2	29	9
19	Saturday..	9	39	10	3	19	10	10	22	10	43	27	8
20	Sunday ..	10	28	10	53	17	10	11	6	11	30	25	2
21	Monday..	11	17	11	44	16	6	11	57	..	23	6	0
22	Tuesday..	..	0	16	15	8	..	0	28	1	2	22	6
23	Wednesday	0	48	1	20	15	5	1	37	2	7	22	3
24	Thursday.	1	55	2	30	16	1	2	39	3	12	23	0
25	Friday ..	3	1	3	31	17	3	3	44	4	17	24	5
26	Saturday..	3	58	4	22	18	2	4	47	5	12	25	6
27	Sunday ..	4	45	5	7	19	1	5	36	5	58	26	9
28	Monday..	5	27	5	47	19	9	6	19	6	39	27	6
29	Tuesday..	6	6	6	24	19	11	6	57	7	17	27	10
30	Wednesday	6	41	7	0	20	3	7	35	7	53	28	3
31	Thursday.	7	16	7	33	20	3	8	9	8	26	28	3

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 7th, 9h. 41m. p.m. | First Quarter. 20th, 9h. 57m. a.m.
 New Moon .. 14th, 2h. 58m. p.m. | Full Moon .. 29th, 1h. 17m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Tuesday..	6	41	6	55	21	4	7	16	7	30	21	0
2	Wednesday	7	11	7	28	20	0	7	46	8	3	20	6
3	Thursday..	7	43	8	0	19	6	8	18	8	35	20	0
4	Friday ..	8	18	8	37	18	9	8	53	9	12	19	3
5	Saturday..	8	55	9	16	17	10	9	30	9	51	18	4
6	Sunday ..	9	36	9	58	16	11	10	11	10	33	17	5
7	Monday..	10	22	10	48	16	0	10	57	11	23	16	6
8	Tuesday..	11	18	11	49	15	6	11	53	..	16	0	11
9	Wednesday	..	0	23	15	10	10	0	24	0	58	16	4
10	Thursday..	1	4	1	42	17	0	1	39	2	17	17	6
11	Friday ..	2	18	2	48	18	10	2	53	3	23	19	4
12	Saturday..	3	17	3	46	20	7	3	52	4	21	21	1
13	Sunday ..	4	15	4	44	21	11	4	50	5	19	22	5
14	Monday..	5	8	5	36	22	9	5	43	6	11	23	3
15	Tuesday..	6	1	6	26	22	11	6	36	7	1	23	5
16	Wednesday	6	52	7	16	22	9	7	27	7	51	23	3
17	Thursday..	7	39	8	3	22	1	8	14	8	38	22	7
18	Friday ..	8	27	8	52	20	11	9	2	9	27	21	5
19	Saturday..	9	14	9	38	19	6	9	49	10	13	20	0
20	Sunday ..	10	3	10	28	17	9	10	38	11	3	18	3
21	Monday..	10	52	11	19	16	7	11	27	11	54	17	1
22	Tuesday..	11	51	..	15	10	10	..	0	26	16	4	..
23	Wednesday	0	23	0	55	15	8	0	58	1	30	16	2
24	Thursday..	1	30	2	5	16	2	2	5	2	40	16	8
25	Friday ..	2	36	3	6	17	3	3	11	3	41	17	9
26	Saturday..	3	33	3	57	18	0	4	8	4	32	18	6
27	Sunday ..	4	20	4	42	18	10	4	55	5	17	19	4
28	Monday..	5	2	5	22	19	5	5	37	5	57	19	11
29	Tuesday..	5	41	5	59	19	7	6	16	6	34	20	1
30	Wednesday	6	16	6	35	19	10	6	51	7	10	20	4
31	Thursday..	6	51	7	8	19	10	7	26	7	43	20	4

The above are in Greenwich Mean Time, if local Time be required for
 Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter.. 7th, 9h. 41m. p.m. | First Quarter. 20th, 9h. 57m. a.m.
 New Moon .. 14th, 2h. 58m. p.m. | Full Moon .. 29th, 1h. 17m. p.m.

W. D.	Newport.						Swansea.						Liverpool.				London.			
	Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Morn.		Even.	
	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.	H.	M.
Tu	8	7	8	21	29	11	7	6	7	20	22	11	..	0	17	2	58	3	15	
Wd	8	37	8	54	27	10	7	36	7	53	21	5	0	31	0	48	3	31	3	44
Th	9	8	9	23	26	11	8	8	8	25	20	10	1	5	1	20	4	0	4	17
Fri	9	40	9	57	25	8	8	43	9	22	0	0	1	36	1	53	4	32	4	48
Sat	10	13	10	32	24	0	9	20	9	41	18	11	2	12	2	31	5	6	5	25
Sun	10	49	11	9	22	8	10	1	10	23	17	11	2	52	3	14	5	44	6	7
Mo	11	32	12	0	21	2	10	47	11	13	16	10	3	38	4	6	6	30	6	55
Tu	..	0	34	20	3		11	43	..	16	3		4	39	5	18	7	23	7	56
Wd	1	8	1	45	20	11	0	14	0	48	16	8	5	56	6	37	8	34	9	12
Th	2	23	2	58	22	10	1	29	2	7	18	0	7	16	7	49	9	48	10	25
Fri	3	34	4	5	25	10	2	43	3	13	20	1	8	21	8	47	11	0	11	33
Sat	4	37	5	9	28	7	3	42	4	11	22	1	9	12	9	36	12	0	..	
Sun	5	37	6	8	30	11	4	40	5	9	23	8	10	0	10	25	0	26	0	51
Mo	6	33	7	1	32	2	5	33	6	1	24	7	10	46	11	12	1	16	1	42
Tu	7	27	7	52	32	6	6	26	6	51	24	9	11	36	..		2	3	2	28
Wd	8	18	8	42	32	2	7	17	7	41	24	7	0	2	0	28	2	52	3	16
Th	9	4	9	26	31	2	8	4	8	28	23	10	0	53	1	16	3	41	4	5
Fri	9	48	10	10	29	3	8	52	9	17	22	6	1	39	2	2	4	28	4	51
Sat	10	30	10	51	26	11	9	39	10	3	20	10	2	27	2	50	5	15	5	40
Sun	11	14	11	38	23	11	10	28	10	53	18	10	3	16	3	44	6	5	6	32
Mo	..	0	5	22	1		11	17	11	44	17	6	4	13	4	45	7	1	7	30
Tu	0	36	1	10	20	11	..	0	16	16	8		5	20	5	58	8	1	8	36
Wd	1	45	2	15	20	7	0	48	1	20	16	5	6	37	7	8	9	14	9	48
Th	2	47	3	20	21	6	1	55	2	30	17	1	7	39	8	9	10	17	10	49
Fri	3	52	4	25	23	1	3	1	3	31	18	3	8	36	9	3	11	21	11	49
Sat	4	55	5	20	24	4	3	58	4	22	19	2	9	26	9	45	..	0	16	
Sun	5	44	6	6	25	10	4	45	5	7	20	1	10	5	10	23	0	40	1	0
Mo	6	27	6	47	26	9	5	27	5	47	20	9	10	40	10	59	1	21	1	40
Tu	7	5	7	25	27	1	6	6	6	24	20	11	11	16	11	34	1	58	2	15
Wd	7	43	8	1	27	6	6	41	7	0	21	3	11	52	..		2	32	2	50
Th	8	17	8	34	27	6	7	16	7	33	21	3	0	11	0	27	3	7	3	25

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter . 5th, 7h. 13m. a.m. | First Quarter. 19th, 11h. 44m. p.m.
 New Moon .. 12th, 10h. 6m. p.m. | Full Moon .. 27th, 3h. 35m. a.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	7	15	7	33	25	11	9	10	9	28	13	5
2	Saturday..	7	50	8	10	25	7	9	43	10	2	13	0
3	Sunday ..	8	29	8	51	25	0	10	19	10	38	12	3
4	Monday..	9	11	9	33	24	5	10	56	11	15	11	7
5	Tuesday..	9	56	10	20	23	10	11	36	11	59	10	10
6	Wednesday	10	44	11	11	23	2	..	0	27	10	0	..
7	Thursday..	11	42	..	..	23	2	0	58	1	31	10	0
8	Friday ..	0	13	0	46	23	7	2	4	2	36	10	6
9	Saturday..	1	25	2	0	24	9	3	12	3	44	12	0
10	Sunday ..	2	34	3	7	26	1	4	20	4	59	13	8
11	Monday..	3	41	4	10	27	4	5	34	6	4	15	2
12	Tuesday..	4	41	5	10	28	1	6	35	7	4	16	2
13	Wednesday	5	39	6	2	28	3	7	34	7	59	16	4
14	Thursday..	6	30	6	53	28	5	8	26	8	49	16	7
15	Friday ..	7	15	7	39	28	0	9	12	9	34	16	0
16	Saturday..	8	4	8	27	27	3	9	56	10	17	15	1
17	Sunday ..	8	48	9	9	26	2	10	36	10	54	13	9
18	Monday..	9	30	9	53	25	0	11	12	11	33	12	3
19	Tuesday..	10	13	10	35	23	10	11	53	..	..	10	10
20	Wednesday	10	57	11	22	22	10	0	17	0	42	9	7
21	Thursday..	11	49	..	..	22	3	1	10	1	39	8	10
22	Friday ..	0	21	0	57	22	1	2	13	2	46	8	8
23	Saturday .	1	32	2	7	22	7	3	18	3	53	9	3
24	Sunday ..	2	40	3	8	23	4	4	28	4	59	10	2
25	Monday..	3	34	4	0	24	2	5	26	5	53	11	3
26	Tuesday..	4	25	4	48	24	11	6	19	6	42	12	2
27	Wednesday	5	9	5	29	25	3	7	3	7	23	12	7
28	Thursday..	5	47	6	5	25	11	7	43	8	2	13	5
29	Friday ..	5	23	6	41	26	5	8	19	8	37	14	1
30	Saturday..	6	58	7	17	26	5	8	54	9	13	14	1

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter.. 5th, 7h. 13m. a.m. | First Quarter. 19th, 11h. 44m. p.m.
 New Moon .. 12th, 10h. 6m. p.m. | Full Moon .. 27th, 3h. 35m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.
1	Friday ..	7 50	8 8	19 11	11	8 42	9 0	27 10	10	9 35	9 53	25 3	3
2	Saturday..	8 25	8 45	19 6	6	9 15	9 34	27 3	3	10 8	10 27	24 7	7
3	Sunday ..	9 4	9 26	18 9	9	9 51	10 8	26 5	5	10 44	11 3	23 6	6
4	Monday ..	9 46	10 8	18 1	1	10 28	10 47	25 5	5	11 21	11 40	22 3	3
5	Tuesday..	10 31	10 55	17 4	4	11 8	11 31	24 6	6	..	0 1	21 2	2
6	Wednesday	11 19	11 46	16 6	6	11 59	..	23 6	6	0 24	0 52	19 11	11
7	Thursday	..	0 17	16 6	6	0 30	1 3	23 6	6	1 23	1 56	19 11	11
8	Friday ..	0 38	1 21	17 0	0	1 36	2 8	24 2	2	2 29	3 1	20 8	8
9	Saturday..	2 0	2 35	18 6	6	2 44	3 16	26 0	0	3 37	4 9	23 0	0
10	Sunday ..	3 9	3 42	20 2	2	3 52	4 31	28 1	1	4 45	5 24	25 7	7
11	Monday..	4 16	4 45	21 8	8	5 6	5 36	30 0	0	5 59	6 29	28 1	1
12	Tuesday..	5 16	5 45	22 8	8	6 7	6 36	31 3	3	7 0	7 29	29 7	7
13	Wednesday	6 14	6 37	22 10	10	7 6	7 31	31 5	5	7 59	8 24	29 9	9
14	Thursday..	7 5	7 28	23 1	1	7 58	8 21	31 8	8	8 51	9 14	30 1	1
15	Friday ..	7 50	8 14	22 6	6	8 44	9 6	31 1	1	9 37	9 59	29 5	5
16	Saturday..	8 39	9 2	21 7	7	9 28	9 49	29 11	11	10 21	10 42	27 11	11
17	Sunday ..	9 23	9 44	20 3	3	10 8	10 26	28 3	3	11 1	11 19	25 9	9
18	Monday..	10 5	10 28	18 9	9	10 44	11 5	26 5	5	11 37	11 5	23 6	6
19	Tuesday..	10 48	11 10	17 4	4	11 25	11 49	24 6	6	..	0 18	21 2	2
20	Wednesday	11 32	11 57	16 1	1	..	0 14	23 0	0	0 42	1 7	19 3	3
21	Thursday..	..	0 24	15 4	4	0 42	1 11	22 1	1	1 35	2 4	18 2	2
22	Friday ..	0 56	1 32	15 2	2	1 45	2 18	21 10	10	2 38	3 11	17 9	9
23	Saturday..	2 7	2 42	15 9	9	2 50	3 25	22 7	7	3 43	4 18	18 9	9
24	Sunday ..	3 15	3 43	16 8	8	4 0	4 31	23 9	9	4 53	5 24	20 3	3
25	Monday..	4 9	4 35	17 9	9	4 58	5 25	25 0	0	5 51	6 18	21 9	9
26	Tuesday..	4 50	5 23	18 8	8	5 51	6 14	26 3	3	6 44	7 7	23 4	4
27	Wednesday	5 44	6 4	19 1	1	6 35	6 55	26 9	9	7 28	7 48	23 11	11
28	Thursday..	6 22	6 40	19 11	11	7 15	7 34	27 10	10	8 8	8 27	25 3	3
29	Friday ..	6 58	7 16	20 7	7	7 51	8 9	28 7	7	8 44	9 2	26 3	3
30	Saturday..	7 33	7 52	20 7	7	8 26	8 45	28 7	7	9 19	9 38	26 3	3

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 5th, 7h. 13m. a.m. | First Quarter. 19th, 11h. 44m. p.m.
 New Moon .. 12th, 10h. 6m. p.m. | Full Moon .. 27th, 3h. 35m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	7	25	7	43	19	7	8	0	8	18	20	1
2	Saturday..	8	0	8	20	19	2	8	35	8	55	19	8
3	Sunday ..	8	39	9	1	18	7	9	14	9	36	19	1
4	Monday..	9	21	9	43	17	11	5	56	10	18	18	5
5	Tuesday..	10	6	10	30	17	4	10	41	11	5	17	10
6	Wednesdy	10	54	11	21	16	7	11	29	11	56	17	1
7	Thursday..	11	52	..	16	7	7	..	0	27	17	1	1
8	Friday ..	0	23	0	56	17	0	0	48	1	31	17	6
9	Saturday..	1	35	2	10	18	4	2	10	2	45	18	10
10	Sunday ..	2	44	3	17	19	9	3	19	3	52	20	3
11	Monday..	3	51	4	20	21	1	4	26	4	55	21	7
12	Tuesday..	4	51	5	20	21	11	5	26	5	55	22	5
13	Wednesdy	5	49	6	12	22	1	6	24	6	47	22	7
14	Thursday..	6	40	7	3	22	4	7	15	7	38	22	10
15	Friday ..	7	25	7	49	21	10	8	0	8	24	22	4
16	Saturday..	8	14	8	37	21	0	8	49	9	12	21	6
17	Sunday ..	8	58	9	19	19	10	9	33	9	54	20	4
18	Monday..	9	40	10	3	18	7	10	15	10	38	19	1
19	Tuesday..	10	23	10	45	17	4	10	58	11	20	17	10
20	Wednesdy	11	7	11	32	16	2	11	42	..	16	8	11
21	Thursday..	11	59	..	15	7	7	0	7	0	34	16	1
22	Friday ..	0	31	1	7	15	5	1	6	1	42	15	11
23	Saturday..	1	42	2	17	15	11	2	17	2	52	16	5
24	Sunday ..	2	50	3	18	16	9	3	25	3	53	17	3
25	Monday..	3	44	4	10	17	8	4	19	4	45	18	2
26	Tuesday..	4	35	4	58	18	6	5	0	5	33	19	0
27	Wednesdy	5	19	5	39	18	10	5	54	6	14	19	4
28	Thursday..	5	57	6	15	19	7	6	32	6	50	20	1
29	Friday ..	6	33	6	51	20	1	7	8	7	26	20	7
30	Saturday..	7	8	7	27	20	1	7	43	8	2	20	7

The above are in Greenwich Mean Time, if local Time be required for
 Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter.. 5th, 7h. 13m. a.m. | First Quarter. 19th, 11h. 44m. p.m.
 New Moon .. 12th, 10h. 6m. p.m. | Full Moon .. 27th, 3h. 35m. a.m.

M. D.	W. D.	Newport.					Swansea.					Liverpool.				London.			
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.	
		H. M.	H. M.	F. I.	F. I.		H. M.	H. M.	F. I.	F. I.		H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	Fri	8 50	9 8	27	1		7 50	8 8	20	11		0 44	1 1	3 40	3 57				
2	Sat	9 23	9 42	26	5		8 25	8 45	20	6		1 20	1 36	4 13	4 32				
3	Sun	9 59	10 18	25	4		9 4	9 26	19	9		1 55	2 14	4 48	5 8				
4	Mo	10 36	10 55	24	2		9 46	10 8	19	1		2 36	2 58	5 27	5 50				
5	Tu	11 16	11 39	23	2		10 31	10 55	18	4		3 22	3 47	6 13	6 38				
6	Wd	..	0 7	22	1		11 19	11 46	17	6		4 15	4 48	7 4	7 32				
7	Th	0 38	1 11	22	1		..	0 17	17	6		5 22	5 59	8 4	8 38				
8	Fri	1 44	2 16	22	10		0 38	1 21	18	0		6 36	7 9	9 15	9 47				
9	Sat	2 52	3 24	24	11		2 0	2 35	19	6		7 44	8 13	10 18	10 54				
10	Sun	4 0	4 39	27	4		3 9	3 42	21	2		8 43	9 13	11 25	11 56				
11	Mo	5 14	5 44	29	7		4 16	4 45	22	8		9 40	10 5	..	0 27				
12	Tu	6 15	6 44	30	11		5 16	5 45	23	8		10 30	10 56	0 55	1 21				
13	Wd	7 14	7 39	31	2		6 14	6 37	23	10		11 24	11 48	1 48	2 13				
14	Th	8 6	8 29	31	5		7 5	7 28	24	1		..	0 16	2 40	3 3				
15	Fri	8 52	9 14	30	9		7 50	8 14	23	6		0 39	1 3	3 30	3 42				
16	Sat	9 36	9 57	29	5		8 39	9 2	22	7		1 26	1 50	4 15	4 38				
17	Sun	10 16	10 34	27	6		9 23	9 44	21	3		2 12	2 34	5 2	5 25				
18	Mo	10 52	11 13	25	4		10 5	10 28	19	9		2 55	3 18	5 47	6 10				
19	Tu	11 33	11 57	23	2		10 48	11 10	18	4		3 43	4 7	6 34	7 0				
20	Wd	..	0 22	21	6		11 32	11 57	17	1		4 35	5 4	7 24	7 52				
21	Th	0 50	1 19	20	5		..	0 24	16	4		5 35	6 9	8 20	8 52				
22	Fri	1 53	2 26	20	1		0 56	1 32	16	2		6 46	7 19	9 23	9 56				
23	Sat	2 58	3 33	21	0		2 7	2 42	16	9		7 49	8 20	10 28	11 0				
24	Sun	4 8	4 39	22	5		3 15	3 43	17	8		8 49	9 13	11 32	..				
25	Mo	5 6	5 33	23	9		4 9	4 35	18	9		9 34	9 56	0 2	0 27				
26	Tu	5 59	6 22	25	2		4 50	5 23	19	8		10 17	10 36	0 49	1 12				
27	Wd	6 43	7 3	25	10		5 44	6 4	20	1		10 55	11 14	1 34	1 54				
28	Th	7 23	7 42	27	1		6 22	6 40	20	11		11 32	11 51	2 12	2 30				
29	Fri	7 59	8 17	27	11		6 58	7 16	21	7		..	0 9	2 48	3 6				
30	Sat	8 34	8 53	27	11		7 33	7 52	21	7		0 27	0 44	3 23	3 40				

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

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PHASES OF THE MOON.

Last Quarter. 5th, 2h. 3m. p.m. | First Quarter. 19th, 3h. 43m. p.
 New Moon .. 11th, 5h. 35m. a.m. | Full Moon .. 27th, 4h. 12m. p.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Sunday ..	7	36	7	55	26	4	9	31	9	48	13	11
2	Monday..	8	15	8	38	26	1	10	6	10	27	13	8
3	Tuesday..	8	57	9	17	25	7	10	44	11	1	13	0
4	Wednesday	9	38	10	1	25	1	11	19	11	41	12	5
5	Thursday..	10	23	10	47	24	4	..	0	3	11	5	11
6	Friday ..	11	15	11	46	23	7	0	31	1	1	10	6
7	Saturday..	..	0	18	23	6	6	1	36	2	10	10	5
8	Sunday ..	0	57	1	35	24	1	2	46	3	22	11	2
9	Monday..	2	11	2	48	25	2	3	57	4	36	12	6
10	Tuesday..	3	23	3	57	26	6	5	15	5	50	14	2
11	Wednesday	4	27	4	57	27	5	6	20	6	51	15	3
12	Thursday..	5	25	5	51	27	9	7	20	7	47	15	9
13	Friday ..	6	17	6	45	28	0	8	13	8	38	16	0
14	Saturday..	7	3	7	23	27	10	8	59	9	18	15	10
15	Sunday ..	7	45	8	5	27	5	9	38	9	57	15	3
16	Monday..	8	27	8	46	26	8	10	17	10	34	14	4
17	Tuesday..	9	5	9	24	25	8	10	51	11	7	13	1
18	Wednesday	9	42	10	1	24	6	11	23	11	41	11	8
19	Thursday..	10	19	10	37	23	5	11	58	..	10	4	11
20	Friday ..	11	1	11	30	22	4	0	20	0	47	8	11
21	Saturday..	11	58	..	21	8	8	1	18	1	49	8	0
22	Sunday ..	0	32	1	9	21	8	2	22	2	57	8	0
23	Monday..	1	46	2	23	22	3	3	32	4	9	8	10
24	Tuesday..	2	56	3	25	23	4	4	45	5	17	10	2
25	Wednesday	3	50	4	16	24	6	5	44	6	9	11	8
26	Thursday..	4	39	5	3	25	6	6	33	6	57	12	11
27	Friday ..	5	23	5	44	25	11	7	18	7	39	13	5
28	Saturday..	6	3	6	22	26	8	8	0	8	18	14	4
29	Sunday ..	6	41	6	59	27	3	8	37	8	55	15	1
30	Monday..	7	18	7	36	27	5	9	14	9	31	15	3
31	Tuesday..	7	56	8	18	27	3	9	49	10	9	15	1

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 5th, 2h. 3m. p.m. | First Quarter. 19th, 3h. 43m. p.m.
 New Moon .. 11th, 5h. 36m. a.m. | Full Moon .. 27th, 4h. 12m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Sunday ..	8	11	8	30	20	5	9	3	9	20	28	6
2	Monday..	8	50	9	13	20	2	9	38	9	59	28	1
3	Tuesday..	9	32	9	52	19	6	10	16	10	33	27	3
4	Wednesday	10	13	10	36	18	11	10	51	11	13	26	6
5	Thursday.	10	58	11	22	17	11	11	35	..	25	3	0
6	Friday ..	11	50	..	17	0	0	0	3	0	33	24	2
7	Saturday..	0	21	0	53	16	11	1	8	1	42	24	0
8	Sunday ..	1	32	2	10	17	8	2	18	2	54	24	11
9	Monday..	2	46	3	23	19	0	3	29	4	8	26	7
10	Tuesday..	3	58	4	32	20	8	4	47	5	22	28	9
11	Wednesday	5	2	5	32	21	10	5	52	6	23	30	2
12	Thursday.	6	0	6	26	22	3	6	52	7	19	30	9
13	Friday ..	6	52	7	19	22	6	7	45	8	10	31	1
14	Saturday..	7	38	7	58	22	4	8	31	8	50	30	10
15	Sunday ..	8	20	8	40	21	10	9	10	9	29	30	2
16	Monday..	9	2	9	21	20	10	9	49	10	6	29	0
17	Tuesday..	9	40	9	59	19	7	10	23	10	39	27	5
18	Wednesday	10	17	10	36	18	2	10	55	11	13	25	6
19	Thursday.	10	54	11	13	16	10	11	30	11	52	23	11
20	Friday ..	11	35	..	15	5	..	..	0	19	22	3	0
21	Saturday..	0	5	0	33	14	6	0	50	1	21	21	1
22	Sunday ..	1	7	1	44	14	6	1	54	2	29	21	1
23	Monday..	2	21	2	58	15	4	3	4	3	41	22	1
24	Tuesday..	3	31	4	0	16	8	4	17	4	49	23	9
25	Wednesday	4	25	4	51	18	2	5	16	5	41	25	6
26	Thursday.	5	14	5	38	19	5	6	5	6	29	27	2
27	Friday ..	5	58	6	19	19	11	6	50	7	11	27	10
28	Saturday .	6	38	6	57	20	10	7	32	7	50	29	0
29	Sunday ..	7	16	7	34	21	7	8	9	8	27	29	11
30	Monday..	7	53	8	11	21	10	8	46	9	3	30	2
31	Tuesday..	8	31	8	53	21	7	9	21	9	40	29	11

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter . 5th, 2h. 3m. p.m. | First Quarter. 19th, 3h. 43m. p.m.
 New Moon .. 11th, 5h. 35m. a.m. | Full Moon .. 27th, 4h. 12m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.						Llanelly.						Milford Haven.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Sunday ..	7	46	8	5	20	0	8	21	8	40	20	6	8	21	8	40	19	10
2	Monday..	8	25	8	48	19	9	9	0	9	23	20	3	9	0	9	23	19	7
3	Tuesday..	9	7	9	27	19	2	9	42	10	2	19	8	9	42	10	2	19	1
4	Wednesday	9	48	10	11	18	8	10	23	10	46	19	2	10	23	10	46	18	7
5	Thursday..	10	33	10	57	17	10	11	8	11	32	18	4	11	8	11	32	17	10
6	Friday ..	11	25	11	56	17	0	12	0	..	..	17	6	12	0	..	..	17	1
7	Saturday..	..	..	0	28	16	11	0	31	1	3	17	5	0	31	1	3	17	0
8	Sunday ..	1	7	1	45	17	7	1	42	2	20	18	1	1	42	2	20	17	7
9	Monday..	2	21	2	58	18	9	2	56	3	33	19	3	2	56	3	33	18	8
10	Tuesday..	3	33	4	7	20	2	4	8	4	42	20	8	4	8	4	42	20	0
11	Wednesday	4	37	5	7	21	3	5	12	5	42	21	9	5	12	5	42	20	11
12	Thursday..	5	35	6	1	21	7	6	10	6	36	22	1	6	10	6	36	21	3
13	Friday ..	6	27	6	55	21	10	7	2	7	29	22	4	7	2	7	29	21	6
14	Saturday..	7	13	7	33	21	8	7	48	8	8	22	2	7	48	8	8	21	4
15	Sunday ..	7	55	8	15	21	3	8	30	8	50	21	9	8	30	8	50	20	11
16	Monday..	8	37	8	56	20	4	9	12	9	31	20	10	9	12	9	31	20	2
17	Tuesday..	9	15	9	34	19	3	9	50	10	9	19	9	9	50	10	9	19	2
18	Wednesday	9	52	10	11	18	0	10	27	10	46	18	6	10	27	10	46	18	0
19	Thursday..	10	29	10	47	16	10	11	4	11	23	17	4	11	4	11	23	16	11
20	Friday ..	11	11	11	40	15	8	11	46	..	..	16	2	11	46	..	..	15	10
21	Saturday..	..	..	0	8	14	10	0	15	0	43	15	4	0	15	0	43	15	2
22	Sunday ..	0	42	1	19	14	10	1	17	1	54	15	4	1	17	1	54	15	2
23	Monday..	1	56	2	33	15	7	2	31	3	8	16	1	2	31	3	8	15	9
24	Tuesday..	3	6	3	35	16	9	3	41	4	10	17	3	3	41	4	10	16	10
25	Wednesday	4	0	4	26	18	0	4	35	5	1	18	6	4	35	5	1	18	0
26	Thursday..	4	49	5	13	19	1	5	24	5	48	19	7	5	24	5	48	19	0
27	Friday ..	5	33	5	54	19	7	6	8	6	29	20	1	6	8	6	29	19	5
28	Saturday..	6	13	6	32	20	4	6	48	7	7	20	10	6	48	7	7	20	2
29	Sunday ..	6	51	7	9	21	0	7	26	7	44	21	6	7	26	7	44	20	9
30	Monday..	7	28	7	46	21	3	8	3	8	21	21	9	8	3	8	21	20	11
31	Tuesday..	8	6	8	28	21	0	8	41	9	3	21	6	8	41	9	3	20	9

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter . 5th, 2h. 3m. p.m. | First Quarter 19th, 3h. 43m. p.m.
 New Moon .. 11th, 5h. 35m. a.m. | Full Moon .. 27th, 4h. 12m. p.m.

M. D.	W. D.	Newport.				Swansea.				Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.
1	Sun	9	11	9	28	27	10	8	11	8	30	21	5	1	4	1	23
2	Mo	9	46	10	7	27	4	8	50	9	13	21	2	1	41	2	2
3	Tu	10	24	10	41	26	5	9	32	9	52	20	6	2	23	2	43
4	Wd	10	59	11	21	25	6	10	13	10	36	19	11	3	4	3	27
5	Th	11	43	..	..	24	0	10	58	11	22	18	11	3	53	4	20
6	Fri	0	11	0	41	22	10	11	50	..	..	18	0	4	52	5	26
7	Sat	1	16	1	50	22	8	0	21	0	53	17	11	6	5	6	43
8	Sun	2	26	3	2	23	8	1	32	2	10	18	8	7	19	7	52
9	Mo	3	37	4	16	25	8	2	46	3	23	20	0	8	24	8	56
10	Tu	4	55	5	30	28	1	3	58	4	32	21	8	9	26	9	53
11	Wd	6	0	6	31	29	9	5	2	5	32	22	10	10	19	10	44
12	Th	7	0	7	27	30	4	6	0	6	26	23	3	11	11	11	36
13	Fri	7	53	8	18	30	9	6	52	7	19	23	6	11	52	..	..
14	Sat	8	39	8	58	30	6	7	38	7	58	23	4	0	28	0	50
15	Sun	9	18	9	37	29	9	8	20	8	40	22	10	1	10	1	31
16	Mo	9	57	10	14	28	4	9	2	9	21	21	10	1	51	2	12
17	Tu	10	31	10	47	26	7	9	40	9	50	20	7	2	32	2	51
18	Wd	11	3	11	21	24	4	10	17	10	36	19	2	3	11	3	32
19	Th	11	38	12	0	22	7	10	54	11	13	17	10	3	53	4	14
20	Fri	..	..	0	27	20	7	11	36	..	..	16	5	4	39	5	10
21	Sat	0	58	1	29	19	3	0	5	0	23	15	6	5	45	6	19
22	Sun	2	2	2	37	19	3	1	7	1	44	15	6	6	55	7	30
23	Mo	3	12	3	49	20	5	2	21	2	58	16	4	8	2	8	33
24	Tu	4	25	4	57	22	5	3	31	4	0	17	8	9	3	9	28
25	Wd	5	24	5	49	24	4	4	25	4	51	19	2	9	49	10	9
26	Th	6	13	6	37	26	3	5	14	5	38	20	5	10	28	10	50
27	Fri	6	58	7	19	27	1	5	58	6	19	20	11	11	9	11	29
28	Sat	7	40	7	58	28	4	6	38	6	57	21	10	11	49	..	..
29	Sun	8	17	8	35	29	5	7	16	7	34	22	7	0	8	0	27
30	Mo	8	54	9	11	29	9	7	53	8	11	22	10	0	45	1	5
31	Tu	9	29	9	49	29	5	8	31	8	53	22	7	1	23	1	42

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 16m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 3rd, 7h. 16m. p.m. | First Quarter. 17th, 9h. 16m. a.m.
 New Moon .. 10th, 2h. 36m. p.m. | Full Moon .. 25th, 3h. 33m. a.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	8	38	8	58	26	10	10	27	10	46	14	7
2	Thursday	9	19	9	40	26	0	11	2	11	22	13	6
3	Friday ..	10	4	10	27	25	1	11	44	..	..	12	5
4	Saturday..	10	52	11	20	23	11	0	7	0	36	10	11
5	Sunday ..	11	55	..	..	23	2	1	8	1	44	10	0
6	Monday..	0	35	1	19	23	3	2	25	3	6	10	1
7	Tuesday..	1	59	2	39	24	3	3	44	4	26	11	4
8	Wednesday	3	16	3	50	25	9	5	7	5	43	13	3
9	Thursday..	4	21	4	50	26	11	6	17	6	44	14	8
10	Friday ..	5	16	5	40	27	3	7	10	7	35	15	1
11	Saturday..	6	1	6	22	27	10	7	58	8	18	15	10
12	Sunday ..	6	41	7	0	28	0	8	37	8	56	16	0
13	Monday..	7	20	7	38	27	9	9	16	9	33	15	9
14	Tuesday..	7	56	8	13	27	0	9	49	10	4	14	9
15	Wednesday	8	30	8	48	26	2	10	19	10	36	13	9
16	Thursday..	9	5	9	21	24	10	10	51	11	5	12	1
17	Friday ..	9	39	9	58	23	9	11	20	11	38	10	9
18	Saturday..	10	19	10	40	22	7	11	58	..	..	9	3
19	Sunday ..	11	6	11	37	21	6	0	22	0	52	7	10
20	Monday..	..	..	0	13	21	1	1	26	2	5	7	4
21	Tuesday..	0	54	1	37	21	6	2	43	3	24	7	10
22	Wednesday	2	16	2	50	22	9	4	2	4	39	9	6
23	Thursday..	3	18	3	45	24	2	5	10	5	38	11	3
24	Friday ..	4	11	4	35	25	7	6	5	6	29	13	0
25	Saturday..	4	57	5	19	26	3	6	51	7	13	13	10
26	Sunday ..	5	40	5	58	27	5	7	35	7	55	15	3
27	Monday..	6	18	6	39	28	2	8	14	8	35	16	3
28	Tuesday..	6	57	7	17	28	6	8	53	9	13	16	8
29	Wednesday	7	37	7	58	28	5	9	32	9	50	16	7
30	Thursday..	8	18	8	39	27	9	10	9	10	27	15	9
31	Friday ..	9	0	9	21	26	8	10	46	11	5	14	4

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 3rd, 7h. 16m. p.m. | First Quarter. 17th, 9h. 16m. a.m.
 New Moon .. 10th, 2h. 36m. p.m. | Full Moon .. 25th, 3h. 33m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	9	13	9	33	21	1	9	59	10	18	29	3
2	Thursday	9	54	10	15	20	0	10	34	10	54	28	0
3	Friday ..	10	39	11	2	18	11	11	16	11	39	26	6
4	Saturday..	11	27	11	55	17	5	..	0	8	24	8	0
5	Sunday ..	..	0	30	16	6	0	40	1	16	23	6	1
6	Monday..	1	10	1	54	16	7	1	57	2	38	23	8
7	Tuesday..	2	34	3	14	17	10	3	16	3	58	25	2
8	Wednesday	3	51	4	25	19	9	4	39	5	15	27	6
9	Thursday	4	56	5	25	21	2	5	47	6	16	29	5
10	Friday ..	5	51	6	15	21	7	6	42	7	7	29	11
11	Saturday..	6	36	6	57	22	4	7	30	7	50	30	10
12	Sunday ..	7	16	7	35	22	6	8	9	8	28	31	1
13	Monday..	7	55	8	13	22	3	8	48	9	530	9	9
14	Tuesday..	8	31	8	48	21	3	9	21	9	36	29	6
15	Wednesday	9	5	9	23	20	3	9	51	10	8	28	3
16	Thursday	9	40	9	56	18	7	10	23	10	37	26	1
17	Friday ..	10	14	10	33	17	3	10	52	11	10	24	5
18	Saturday..	10	54	11	15	15	9	11	30	11	54	22	7
19	Sunday ..	11	41	..	14	4	..	..	0	24	20	10	0
20	Monday..	0	12	0	48	13	10	0	58	1	37	20	3
21	Tuesday..	1	29	2	12	14	4	2	15	2	56	20	10
22	Wednesday	2	51	3	25	16	0	3	34	4	11	22	10
23	Thursday	3	53	4	20	17	9	4	42	5	10	25	0
24	Friday ..	4	46	5	10	19	6	5	37	6	1	27	3
25	Saturday..	5	32	5	54	20	4	6	23	6	45	28	4
26	Sunday ..	6	15	6	33	21	10	7	7	7	27	30	2
27	Monday..	6	53	7	14	22	9	7	46	8	7	31	4
28	Tuesday..	7	32	7	52	23	2	8	25	8	45	31	9
29	Wednesday	8	12	8	33	23	1	9	4	9	22	31	8
30	Thursday	8	53	9	14	22	3	9	41	9	59	30	9
31	Friday ..	9	35	9	56	20	10	10	18	10	37	29	0
		11	11	11	30	26	9						

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter.. 3rd, 7h. 16m. p.m. | First Quarter. 17th, 9h. 16m. a.m.
 New Moon .. 10th, 2h. 36m. p.m. | Full Moon .. 25th, 3h. 33m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	8	48	9	8	20	7	9	23	9	43	21	1
2	Thursday..	9	29	9	50	19	8	10	4	10	25	20	2
3	Friday ..	10	14	10	37	18	8	10	49	11	12	19	2
4	Saturday..	11	2	11	30	17	5	11	37	..	17	11	
5	Sunday ..	..		0	5	16	7	0	5	0	40	17	1
6	Monday..	0	45	1	29	16	8	1	20	2	4	17	2
7	Tuesday..	2	9	2	49	17	9	2	44	3	24	18	3
8	Wednesday	3	26	4	0	19	5	4	1	4	35	19	11
9	Thursday..	4	31	5	0	20	8	5	6	5	35	21	2
10	Friday ..	5	26	5	50	21	0	6	1	6	25	21	6
11	Saturday..	6	11	6	32	21	8	6	46	7	7	22	2
12	Sunday ..	6	51	7	10	21	10	7	26	7	45	22	4
13	Monday..	7	30	7	48	21	7	8	5	8	23	22	1
14	Tuesday..	8	6	8	23	20	9	8	41	8	58	21	3
15	Wednesday	8	40	8	58	19	10	9	15	9	33	20	4
16	Thursday..	9	15	9	31	18	5	9	50	10	6	18	11
17	Friday ..	9	49	10	8	17	3	10	24	10	43	17	9
18	Saturday..	10	29	10	50	15	11	11	4	11	25	16	5
19	Sunday ..	11	16	11	47	14	8	11	51	..	15	2	
20	Monday..	..		0	23	14	3	0	22	0	58	14	9
21	Tuesday..	1	4	1	47	14	8	1	39	2	22	15	2
22	Wednesday	2	26	3	0	16	1	3	1	3	35	16	7
23	Thursday..	3	28	3	55	17	8	4	3	4	30	18	2
24	Friday ..	4	21	4	45	19	2	4	56	5	20	19	8
25	Saturday .	5	7	5	29	19	11	5	42	6	4	20	5
26	Sunday ..	5	50	6	8	21	3	6	25	6	43	21	9
27	Monday..	6	28	6	49	22	0	7	3	7	24	22	6
28	Tuesday..	7	7	7	27	22	5	7	42	8	2	22	11
29	Wednesday	7	47	8	8	22	4	8	22	8	43	22	10
30	Thursday..	8	28	8	49	21	7	9	3	9	24	22	1
31	Friday ..	9	10	9	31	20	4	9	45	10	6	20	10

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 3rd, 7h. 16m. p.m. | First Quarter. 17th, 9h. 16m. a.m.
 New Moon .. 10th, 2h. 36m. p.m. | Full Moon .. 25th, 3h. 33m. a.m.

M.	W.	Newport.						Swansea.						Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Morn.		Even.	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.	H.	M.
1	Wd	10	7	10	26	28	7	9	13	9	33	22	1	2	3	2	23	4	54	5	16
2	Th	10	42	11	2	27	3	9	54	10	15	21	0	2	44	3	5	5	36	5	58
3	Fri	11	24	11	47	25	6	10	39	11	2	19	11	3	30	3	56	6	21	6	46
4	Sat	..	0	16	23	4		11	27	11	55	18	5	4	24	4	58	7	13	7	41
5	Sun	0	48	1	24	22	1	..	0	30	17	6		5	33	6	14	8	14	8	50
6	Mo	2	5	2	46	22	3	1	10	1	54	17	7	6	58	7	38	9	28	10	8
7	Tu	3	24	4	6	23	11	2	34	3	14	18	10	8	13	8	48	10	48	11	25
8	Wd	4	47	5	23	26	9	3	51	4	25	20	9	9	20	9	48	..	0	1	
9	Th	5	55	6	24	28	9	4	56	5	25	22	2	10	14	10	38	0	34	1	3
10	Fri	6	50	7	15	29	5	5	51	6	15	22	7	11	2	11	25	1	31	1	56
11	Sat	7	38	7	58	30	6	6	36	6	57	23	4	11	47	..		2	18	2	41
12	Sun	8	17	8	36	30	9	7	16	7	35	23	6	0	8	0	27	3	2	3	22
13	Mo	8	56	9	13	30	4	7	55	8	13	23	3	0	46	1	7	3	40	3	59
14	Tu	9	29	9	44	28	11	8	31	8	48	22	3	1	25	1	42	4	19	4	37
15	Wd	9	59	10	16	27	6	9	5	9	23	21	3	1	58	2	15	4	54	5	11
16	Th	10	31	10	45	25	0	9	40	9	56	19	7	2	34	2	51	5	28	5	47
17	Fri	11	0	11	18	23	1	10	14	10	33	18	3	3	8	3	28	6	6	6	24
18	Sat	11	38	..	21	0		10	54	11	15	16	9	3	49	4	14	6	44	7	6
19	Sun	0	2	0	32	19	0	11	41	..	15	4		4	41	5	16	7	31	7	58
20	Mo	1	6	1	45	18	3	0	12	0	48	14	10	5	54	6	37	8	32	9	10
21	Tu	2	23	3	4	19	0	1	29	2	12	15	4	7	16	7	54	9	48	10	25
22	Wd	3	42	4	19	21	4	2	51	3	25	17	0	8	28	8	58	11	5	11	40
23	Th	4	50	5	18	23	9	3	53	4	20	18	9	9	22	9	44	..	0	11	
24	Fri	5	45	6	9	26	5	4	46	5	10	20	6	10	6	10	25	0	36	0	59
25	Sat	6	31	6	53	27	8	5	32	5	54	21	4	10	44	11	5	1	22	1	43
26	Sun	7	15	7	35	29	9	6	15	6	33	22	10	11	25	11	44	2	2	2	21
27	Mo	7	54	8	15	31	1	6	53	7	14	23	9	..	0	4		2	41	2	59
28	Tu	8	33	8	53	31	6	7	32	7	52	24	2	0	25	0	43	3	18	3	38
29	Wd	9	12	9	30	31	5	8	12	8	33	24	1	1	4	1	24	3	56	4	16
30	Th	9	49	10	7	30	4	8	53	9	14	23	3	1	43	2	3	4	36	4	55
31	Fri	10	26	10	45	28	4	9	35	9	56	21	10	2	24	2	46	5	16	5	37

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter.. 1st, 12h. 8m. p.m. | Full Moon .. 24th, 2h. 5m. p.m.
 New Moon .. 8th, 2h. 14m. a.m. | Last Quarter. 30th, 6h. 8m. a.m.
 First Quarter. 16th, 3h. 28m. a.m.

M. D.	WEEK DAYS.	Barnstable.					Bridgewater.					Bristol.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H.	M.	H.	M.	F.	H.	M.	H.	M.	F.	H.	M.	H.	M.	F.
1	Saturday ..	9	44	10	9	25	4	11	25	11	48	12	8	11	5	11
2	Sunday ..	10	34	11	5	23	9	..	0	16	10	9	11	56	..	22
3	Monday ..	11	40	..	22	8	0	50	1	29	9	4	0	30	1	9
4	Tuesday ..	0	21	1	8	22	9	2	13	2	56	9	6	1	53	2
5	Wednesday	1	53	2	30	23	10	3	38	4	17	10	10	3	18	3
6	Thursday ..	3	5	3	37	25	3	4	55	5	30	12	7	4	35	5
7	Friday ..	4	7	4	35	26	6	6	0	6	29	14	2	5	40	6
8	Saturday ..	4	58	5	21	26	11	6	53	7	15	14	8	6	33	6
9	Sunday ..	5	42	5	59	27	7	7	37	7	56	15	6	7	17	7
10	Monday ..	6	17	6	33	27	10	8	13	8	29	15	10	7	53	8
11	Tuesday ..	6	51	7	9	27	8	8	47	9	5	15	7	8	27	8
12	Wednesday	7	24	7	40	27	1	9	19	9	35	14	11	8	59	9
13	Thursday ..	7	56	8	13	26	4	9	49	10	4	13	11	9	29	9
14	Friday ..	8	30	8	47	25	3	10	19	10	35	12	7	9	59	10
15	Saturday ..	9	4	9	22	24	0	10	50	11	5	11	0	10	30	10
16	Sunday ..	9	41	10	3	22	9	11	22	11	43	9	6	11	2	11
17	Monday ..	10	27	10	54	21	7	..	0	8	7	11	11	11	48	..
18	Tuesday ..	11	27	..	21	0	0	39	1	15	7	2	0	19	0	55
19	Wednesday	0	3	0	47	21	3	1	55	2	37	7	6	1	35	2
20	Thursday ..	1	29	2	7	22	4	3	15	3	54	8	11	2	55	3
21	Friday ..	2	41	3	11	24	0	4	29	5	1	11	0	4	9	4
22	Saturday ..	3	36	4	1	25	9	5	29	5	55	13	3	5	9	5
23	Sunday ..	4	26	4	50	26	9	6	20	6	44	14	6	6	0	6
24	Monday ..	5	10	5	31	27	11	7	4	7	25	15	11	6	44	7
25	Tuesday ..	5	51	6	10	28	11	7	47	8	7	17	2	7	27	7
26	Wednesday	6	32	6	54	29	3	8	28	8	50	17	7	8	8	8
27	Thursday ..	7	14	7	35	28	11	9	10	9	30	17	2	8	50	9
28	Friday ..	7	59	8	21	28	2	9	52	10	12	16	3	9	32	9
29	Saturday ..	8	44	9	5	26	10	10	32	10	51	14	7	10	12	10
30	Sunday ..	9	30	9	57	25	3	11	12	11	37	12	7	10	52	11

The above are in Greenwich Mean Time, if local Time be required for
 Barnstable, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 1st, 12h 8m. p.m. | Full Moon .. 24th, 2h. 6m. p.m.
 New Moon .. 8th, 2h. 14m. a.m. | Last Quarter. 30th, 6h. 8m. a.m.
 First Quarter. 16th, 3h. 28m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.	Even.	Height		Morn.	Even.	Height		Morn.	Even.	Height	
		H. M.	H. M.	F.	I.	H. M.	H. M.	F.	I.	H. M.	H. M.	F.	I.
1	Saturday ..	10 19	10 44	19	2	10 57	11 20	26	11	11 50	..	24	1
2	Sunday ..	11 9	11 40	17	3	11 48	..	24	5	0 13	0 41	21	0
3	Monday ..	..	0 15	15	10	0 22	1 12	22	9	1 15	1 54	18	11
4	Tuesday ..	0 56	1 43	16	0	1 45	2 28	22	10	2 38	3 21	19	1
5	Wednesday	2 28	3 5	17	4	3 10	3 49	24	6	4 3	4 42	21	2
6	Thursday ..	3 40	4 12	19	1	4 27	5 2	26	9	5 20	5 55	23	11
7	Friday ..	4 42	5 10	20	8	5 32	6 1	28	9	6 25	6 54	26	5
8	Saturday ..	5 33	5 56	21	2	6 25	6 47	29	5	7 18	7 40	27	3
9	Sunday ..	6 17	6 34	22	0	7 9	7 28	30	6	8 2	8 21	28	7
10	Monday ..	6 52	7 8	22	4	7 45	8 1	30	10	8 38	8 54	29	1
11	Tuesday ..	7 26	7 44	22	1	8 19	8 37	30	7	9 12	9 30	28	9
12	Wednesday	7 59	8 15	21	5	8 51	9 7	29	8	9 44	10 0	27	7
13	Thursday ..	8 31	8 48	20	5	9 21	9 36	28	6	10 14	10 29	26	1
14	Friday ..	9 5	9 22	19	1	9 51	10 7	26	9	10 45	11 0	23	11
15	Saturday ..	9 39	9 57	17	6	10 22	10 37	24	10	11 15	11 30	21	6
16	Sunday ..	10 16	10 38	16	0	10 54	11 15	22	10	11 47	..	19	1
17	Monday ..	11 2	11 29	14	5	11 40	..	21	0	0 8	0 33	16	9
18	Tuesday ..	..	0 2	13	8	0 11	0 47	20	1	1 4	1 40	15	7
19	Wednesday	0 38	1 22	14	0	1 27	2 9	20	6	2 20	3 2	16	1
20	Thursday ..	2 4	2 43	15	5	2 47	3 26	22	3	3 40	4 19	18	4
21	Friday ..	3 16	3 46	17	6	4 1	4 33	24	10	4 54	5 26	21	6
22	Saturday ..	4 11	4 36	19	9	5 1	5 27	27	6	5 54	6 20	24	11
23	Sunday ..	5 1	5 25	21	0	5 52	6 16	29	1	6 45	7 9	26	11
24	Monday ..	5 45	6 6	22	5	6 36	6 57	31	0	7 29	7 50	29	3
25	Tuesday ..	6 26	6 45	23	8	7 19	7 39	32	6	8 12	8 32	31	1
26	Wednesday	7 7	7 29	24	1	8 0	8 22	33	0	8 53	9 15	31	9
27	Thursday ..	7 49	8 10	23	8	8 42	9 2	32	6	9 35	9 55	31	1
28	Friday ..	8 34	8 56	22	9	9 24	9 44	31	4	10 17	10 37	29	8
29	Saturday ..	9 19	9 40	21	1	10 4	10 23	29	3	10 57	11 16	27	1
30	Sunday ..	10 5	10 32	19	1	10 44	11 9	26	9	11 37	..	23	11

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 1st, 12h. 8m. p.m. | Full Moon .. 24th, 2h. 6m. p.m.
 New Moon .. 8th, 2h. 14m. a.m. | Last Quarter .30th, 6h. 8m. a.m.
 First Quarter. 16th, 3h. 28m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Saturday..	9	54	10	19	18	11	10	29	10	54	19	5
2	Sunday ..	10	44	11	15	17	3	11	19	11	50	17	3
3	Monday..	11	50	..	16	0		..	0	25	16	6	
4	Tuesday..	0	31	1	18	16	1	1	6	1	53	16	7
5	Wednesdy	2	3	2	40	17	4	2	38	3	15	17	10
6	Thursday.	3	15	3	47	18	10	3	50	4	22	19	4
7	Friday ..	4	17	4	45	20	2	4	52	5	20	20	8
8	Saturday..	5	8	5	31	20	8	5	43	6	6	21	2
9	Sunday ..	5	52	6	9	21	5	6	27	6	44	21	11
10	Monday..	6	27	6	43	21	8	7	2	7	18	22	2
11	Tuesday..	7	1	7	19	21	6	7	36	7	54	22	2
12	Wednesdy	7	34	7	50	20	10	8	9	8	25	21	4
13	Thursday.	8	6	8	23	20	0	8	41	8	58	20	6
14	Friday ..	8	40	8	57	18	10	9	15	9	32	19	4
15	Saturday..	9	14	9	32	17	6	9	49	10	7	18	0
16	Sunday ..	9	51	10	13	16	1	10	26	10	48	16	7
17	Monday..	10	37	11	4	14	9	11	12	11	39	15	3
18	Tuesday..	11	37	..	14	1		..	0	12	14	7	
19	Wednesdy	0	13	0	57	14	5	0	48	1	32	14	11
20	Thursday.	1	39	2	17	15	8	2	14	2	53	16	2
21	Friday ..	2	51	3	21	17	6	3	26	3	56	18	0
22	Saturday..	3	46	4	11	19	5	4	21	4	46	19	11
23	Sunday ..	4	36	5	0	20	6	5	11	5	35	21	0
24	Monday..	5	20	5	41	21	9	5	55	6	16	22	3
25	Tuesday..	6	1	6	20	22	10	6	36	6	55	23	4
26	Wednesdy	6	42	7	4	23	2	7	17	7	39	23	8
27	Thursday.	7	24	7	45	22	10	7	59	8	20	23	4
28	Friday ..	8	9	8	31	22	0	8	44	9	6	22	6
29	Saturday..	8	54	9	15	20	7	9	29	9	50	21	1
30	Sunday ..	9	40	10	7	18	10	10	15	10	42	19	4

The above are in Greenwich Mean Time, if local Time be required for
 Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter . 1st, 12h. 8m. p.m. | Full Moon .. 24th, 2h. 5m. p.m.
 New Moon .. 8th, 2h. 14m. a.m. | Last Quarter. 30th, 6h. 8m. a.m.
 First Quarter. 16th, 3h. 28m. a.m.

M. D.	W. D.	Newport.					Swansea.					Liverpool.				London.			
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.	
		H. M.	H. M.	H. M.	F. I.		H. M.	H. M.	H. M.	F. I.		H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	Sat	11 5	11 28	26	0		10 19	10 44	20	2		3 8	3 33			6 0	6 24		
2	Sun	11 56	..	23	1		11 9	11 40	18	3		4 2	4 34			6 50	7 19		
3	Mo	0 30	1 9	21	2	..	..	0 15	16	10		5 14	5 57			7 51	8 30		
4	Tu	1 53	2 36	21	4	0 56	1 43	17	0			6 46	7 29			9 13	9 56		
5	Wd	3 18	3 57	23	2	2 28	3 5	18	4			8 7	8 40			10 38	11 19		
6	Th	4 35	5 10	25	10	3 40	4 12	20	1			9 10	9 37			11 53	..		
7	Fri	5 40	6 9	28	1	4 42	5 10	21	8			10 2	10 25			0 24	0 52		
8	Sat	6 33	6 55	28	9	5 33	5 56	22	2			10 46	11 7			1 18	1 43		
9	Sun	7 17	7 36	30	1	6 17	6 34	23	0			11 27	11 45			2 3	2 23		
10	Mo	7 53	8 9	30	6	6 52	7 8	23	4			..	0 3			2 43	3 0		
11	Tu	8 27	8 45	30	2	7 26	7 44	23	1			0 19	0 37			3 17	3 33		
12	Wd	8 59	9 15	29	1	7 59	8 15	22	5			0 56	1 11			3 50	4 8		
13	Th	9 29	9 44	27	10	8 31	8 48	21	5			1 27	1 42			4 23	4 39		
14	Fri	9 59	10 15	25	10	9 5	9 22	20	1			1 58	2 15			4 54	5 11		
15	Sat	10 30	10 45	23	6	9 39	9 57	18	6			2 33	2 50			5 28	5 46		
16	Sun	11 2	11 23	21	4	10 16	10 38	17	0			3 9	3 31			6 5	6 25		
17	Mo	11 48	..	19	2	11 2	11 29	15	5			3 55	4 35			6 47	7 12		
18	Tu	0 19	0 55	18	1	..	0 2	14	8			5 1	5 41			7 42	8 17		
19	Wd	1 35	2 17	18	7	0 38	1 22	15	0			6 26	7 10			8 58	9 38		
20	Th	2 55	3 34	20	7	2 4	2 43	16	5			7 47	8 21			10 19	10 57		
21	Fri	4 9	4 41	23	6	3 16	3 46	18	6			8 50	9 15			11 33	..		
22	Sat	5 9	5 35	26	9	4 11	4 36	20	9			9 56	9 57			0 3	0 29		
23	Sun	6 0	6 24	28	5	5 1	5 25	22	0			10 18	10 38			0 51	1 13		
24	Mo	6 44	7 5	30	8	5 45	6 6	23	5			10 56	11 16			1 35	1 56		
25	Tu	7 27	7 47	32	4	6 26	6 45	24	8			11 36	11 56			2 13	2 32		
26	Wd	8 8	8 30	33	0	7 7	7 29	25	1			..	0 18			2 52	3 11		
27	Th	8 50	9 10	32	4	7 49	8 10	24	8			0 40	1 1			3 32	3 53		
28	Fri	9 32	9 52	31	1	8 34	8 56	23	9			1 22	1 45			4 13	4 34		
29	Sat	10 12	10 31	28	7	9 19	9 40	22	1			2 6	2 29			4 57	5 19		
30	Sun	10 52	11 17	25	10	10 5	10 32	20	1			2 51	3 18			5 42	6 6		

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 8th, 4h. 58m. p.m. | Full Moon .. 23rd, 12h. 12m. p.m.
 First Quarter. 16th, 9h. 23m. p.m. | Last Quarter. 30th, 2h. 45m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Monday..	10 25	10 55	23 7	7	..	0 5	10 6	6	11 45	..	22 5	5
2	Tuesday..	11 30	..	22 4	4	0 40	1 18	8 11	11	0 20	0 58	20 2	2
3	Wednesday	0 10	0 56	22 5	5	2 2	2 45	9 1	1	1 42	2 25	20 4	4
4	Thursday	1 41	2 18	23 6	6	3 27	4 4	10 5	5	3 7	3 44	22 3	3
5	Friday ..	2 50	3 18	24 11	11	4 39	5 10	12 2	2	4 19	4 50	24 10	10
6	Saturday..	3 47	4 9	26 0	0	5 40	6 3	13 6	6	5 20	5 45	26 10	10
7	Sunday ..	4 32	4 52	26 10	10	6 26	6 47	14 7	7	6 6	6 27	28 4	4
8	Monday..	5 15	5 33	27 1	1	7 9	7 27	14 11	11	6 49	7 7	28 10	10
9	Tuesday..	5 50	6 6	27 4	4	7 46	8 3	15 2	2	7 26	7 43	29 4	4
10	Wednesday	6 24	6 40	27 3	3	8 20	8 36	15 1	1	8 0	8 16	29 2	2
11	Thursday.	6 56	7 12	26 11	11	8 52	9 8	14 8	8	8 32	8 48	28 6	6
12	Friday ..	7 26	7 43	26 3	3	9 21	9 38	13 10	10	9 1	9 18	27 4	4
13	Saturday..	8 1	8 18	25 4	4	9 53	10 9	12 8	8	9 33	9 49	25 8	8
14	Sunday ..	8 35	8 53	24 3	3	10 24	10 40	11 4	4	10 4	10 20	23 7	7
15	Monday..	9 13	9 33	23 2	2	10 58	11 15	10 0	0	10 38	10 55	21 8	8
16	Tuesday..	9 55	10 23	22 2	2	11 35	..	8 9	9	11 15	11 43	19 11	11
17	Wednesday	10 50	11 22	21 4	4	0 3	0 35	7 7	7	..	0 15	18 4	4
18	Thursday.	11 57	..	21 5	5	1 10	1 49	7 9	9	0 50	1 29	18 6	6
19	Friday ..	0 38	1 21	22 4	4	2 29	3 8	8 11	11	2 9	2 48	20 2	2
20	Saturday..	1 57	2 39	24 0	0	3 42	4 16	11 0	0	3 22	3 56	23 3	3
21	Sunday ..	2 57	3 23	25 9	9	4 46	5 15	13 3	3	4 26	4 55	26 4	4
22	Monday..	3 50	4 13	27 3	3	5 43	6 7	15 1	1	5 23	5 47	29 2	2
23	Tuesday..	4 37	5 3	28 6	6	6 31	6 57	16 8	8	6 11	6 37	31 4	4
24	Wednesday	5 26	5 49	29 0	0	7 21	7 45	17 3	3	7 1	7 25	32 4	4
25	Thursday.	6 10	6 32	29 4	4	8 7	8 28	17 8	8	7 47	8 8	32 11	11
26	Friday ..	6 56	7 17	29 0	0	8 52	9 13	17 3	3	8 32	8 53	32 4	4
27	Saturday..	7 41	8 5	28 3	3	9 36	9 57	16 4	4	9 16	9 37	30 11	11
28	Sunday ..	8 31	8 55	26 10	10	10 20	10 42	14 7	7	10 0	10 22	28 4	4
29	Monday..	9 19	9 45	25 4	4	11 3	11 26	12 8	8	10 43	11 6	25 8	8
30	Tuesday..	10 14	10 42	23 10	10	11 54	..	10 10	10	11 34	..	22 10	10
31	Wednesday	11 13	11 47	22 9	9	0 25	1 0	9 6	6	0 5	0 40	20 11	11

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 8th, 4h. 58m. p.m.	Full Moon .. 23rd, 12h. 12m. p.m.
First Quarter 16th, 9h. 23m. p.m.	Last Quarter. 16th, 9h. 23m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.						Cardiff.						Gloucester.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Monday..	11	0	11	30	17	0	11	37	..	24	2	0	2	0	30	20	8	
2	Tuesday..	..	..	0	5	15	5	0	12	0	50	22	3	1	5	1	43	18	4
3	Wednesday	0	45	1	31	15	7	1	34	2	17	22	4	2	27	3	10	18	5
4	Thursday..	2	16	2	53	16	11	2	59	3	36	24	0	3	52	4	29	20	6
5	Friday ..	3	25	3	53	18	8	4	11	4	42	26	3	5	4	5	35	23	4
6	Saturday..	4	22	4	44	20	0	5	12	5	35	28	0	6	5	6	28	25	5
7	Sunday ..	5	7	5	27	21	1	5	58	6	19	29	3	6	51	7	12	27	1
8	Monday..	5	50	6	8	21	5	6	41	6	59	29	8	7	54	7	52	27	7
9	Tuesday..	6	25	6	41	21	8	7	18	7	35	30	0	8	11	8	28	28	1
10	Wednesday	6	59	7	15	21	7	7	52	8	8	29	11	8	45	9	1	27	11
11	Thursday..	7	31	7	47	21	2	8	24	8	40	29	5	9	17	9	33	27	3
12	Friday ..	8	1	8	18	20	4	8	53	9	10	28	4	9	46	10	3	25	11
13	Saturday..	8	36	8	53	19	2	9	25	9	41	26	11	10	18	10	34	24	1
14	Sunday ..	9	10	9	28	17	10	9	56	10	12	25	2	10	49	11	5	21	11
15	Monday..	9	48	10	8	16	6	10	30	10	47	23	6	11	23	11	40	19	11
16	Tuesday..	10	30	10	58	15	3	11	7	11	35	22	0	12	0	..	18	0	..
17	Wednesday	11	25	11	57	14	1	..	..	0	7	20	7	0	28	1	0	16	3
18	Thursday..	..	..	0	32	14	3	0	42	1	21	20	9	1	35	2	14	16	5
19	Friday ..	1	13	1	56	15	5	2	1	2	40	22	3	2	54	3	33	18	4
20	Saturday..	2	32	3	4	17	6	3	14	3	48	24	10	4	7	4	41	21	6
21	Sunday ..	3	32	3	58	19	9	4	18	4	47	27	6	5	11	5	40	24	11
22	Monday..	4	25	4	48	21	7	5	15	5	39	29	11	6	8	6	32	27	11
23	Tuesday..	5	12	5	38	23	2	6	3	6	29	31	9	6	56	7	22	30	3
24	Wednesday	6	1	6	24	23	9	6	53	7	17	32	7	7	46	8	10	31	3
25	Thursday..	6	45	7	7	24	2	7	39	8	0	33	2	8	32	8	53	31	11
26	Friday ..	7	31	7	52	23	9	8	24	8	45	32	7	9	17	9	38	31	3
27	Saturday..	8	16	8	40	22	10	9	8	9	29	31	5	10	1	10	22	29	9
28	Sunday ..	9	6	9	30	21	1	9	52	10	14	29	3	10	46	11	7	27	1
29	Monday..	9	54	10	20	19	2	10	35	10	58	26	11	11	28	11	51	24	1
30	Tuesday..	10	49	11	17	17	4	11	26	11	57	24	6	..	..	0	19	21	2
31	Wednesday	11	48	..	..	16	0	..	..	0	32	22	10	0	50	1	25	19	1

The above are in Greenwich Mean Time, if local Time be required for Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 8th, 4h. 58m. p.m. | Full Moon .. 23rd, 12h. 12m. p.
 First Quarter. 16th, 9h. 23m. p.m. | Last Quarter.. 30th, 2h. 45m. p.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Monday..	10	35	11	5	17	0	11	10	11	40	17	6
2	Tuesday..	11	40	..	..	15	8	..	0	15	16	2	..
3	Wednesday	0	20	1	6	15	9	0	55	1	41	16	3
4	Thursday..	1	51	2	28	16	11	2	26	3	3	17	5
5	Friday ..	3	0	3	28	18	6	3	35	4	3	19	0
6	Saturday..	3	57	4	19	19	8	4	32	4	54	20	2
7	Sunday ..	4	42	5	2	20	7	5	17	5	37	21	1
8	Monday..	5	25	5	43	20	10	6	0	6	18	21	4
9	Tuesday..	6	0	6	16	21	1	6	35	6	51	21	7
10	Wednesday	6	34	6	50	21	0	7	9	7	25	21	6
11	Thursday..	7	6	7	22	20	8	7	41	7	57	21	2
12	Friday ..	7	36	7	53	19	11	8	11	8	28	20	5
13	Saturday..	8	11	8	28	18	11	8	46	9	3	19	5
14	Sunday ..	8	45	9	3	17	9	9	20	9	38	18	3
15	Monday..	9	23	9	43	16	7	9	58	10	18	17	1
16	Tuesday..	10	5	10	33	15	6	10	40	11	8	16	0
17	Wednesday	11	0	11	32	14	6	11	35	..	15	0	11
18	Thursday..	..	0	7	14	7	..	0	7	0	42	15	1
19	Friday ..	0	48	1	31	15	8	1	23	2	6	16	2
20	Saturday..	2	7	2	39	17	6	2	42	3	14	18	0
21	Sunday ..	3	7	3	33	19	5	3	42	4	8	19	11
22	Monday..	4	0	4	23	21	0	4	35	4	58	21	6
23	Tuesday..	4	47	5	13	22	5	5	22	5	48	22	11
24	Wednesday	5	36	5	59	22	11	6	11	6	34	23	5
25	Thursday..	6	20	6	42	23	3	6	55	7	17	23	9
26	Friday ..	7	6	7	27	22	11	7	41	8	2	23	5
27	Saturday .	7	51	8	15	22	1	8	26	8	50	22	7
28	Sunday ..	8	41	9	5	20	7	9	16	9	40	21	1
29	Monday..	9	29	9	55	18	11	10	4	10	30	19	5
30	Tuesday..	10	24	10	52	17	4	10	59	11	27	17	10
31	Wednesday	11	23	11	57	16	1	11	58	..	16	7	11

The above are in Greenwich Mean Time, if local Time be required for
 Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 8th, 4h. 58m. p.m. | Full Moon .. 23rd, 12h. 12m. p.m.
 First Quarter 16th, 9h. 23m. p.m. | Last Quarter. 30th, 2h. 45m. p.m.

M. W. M. D.	Newport.					Swansea.					Liverpool.				London.			
	Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.	
	H. M.	H. M.	H. M.	F. I.		H. M.	H. M.	H. M.	F. I.		H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1 Mo	11 45	..	22 10	7	11 0	11 30	18 0	3 48	4 22	6 34	7 5	6 34	7 5	6 34	7 5	6 34	7 5	6 34
2 Tu	0 20	0 58	20 7	7	..	0 51	16 5	5 2	5 45	7 39	8 18	7 39	8 18	7 39	8 18	7 39	8 18	7 39
3 Wd	1 42	2 25	20 9	7	0 45	1 31	16 7	6 34	7 18	9 2	9 45	9 2	9 45	9 2	9 45	9 2	9 45	9 2
4 Th	3 7	3 44	22 8	8	2 16	2 53	17 11	7 57	8 29	10 27	11 8	10 27	11 8	10 27	11 8	10 27	11 8	10 27
5 Fri	4 19	4 50	25 2	2	3 25	3 53	19 8	8 58	9 22	11 42	..	11 42	..	11 42	..	11 42	..	11 42
6 Sat	5 20	5 45	27 3	3	4 22	4 44	21 0	9 45	10 4	0 11	0 36	0 11	0 36	0 11	0 36	0 11	0 36	0 11
7 Sun	6 6	6 27	28 7	7	5 7	5 27	22 1	10 23	10 40	1 0	1 20	1 0	1 20	1 0	1 20	1 0	1 20	1 0
8 Mo	6 49	7 7	29 1	1	5 50	6 8	22 5	11 1	11 18	1 40	1 58	1 40	1 58	1 40	1 58	1 40	1 58	1 40
9 Tu	7 26	7 43	29 7	7	6 25	6 41	22 8	11 35	11 52	2 17	2 34	2 17	2 34	2 17	2 34	2 17	2 34	2 17
10 Wd	8 0	8 16	29 5	5	6 59	7 15	22 7	..	0 10	2 51	3 7	2 51	3 7	2 51	3 7	2 51	3 7	2 51
11 Th	8 32	8 48	28 9	9	7 31	7 47	22 2	0 26	0 42	3 24	3 39	3 24	3 39	3 24	3 39	3 24	3 39	3 24
12 Fri	9 1	9 18	27 8	8	8 1	8 18	21 4	0 59	1 13	3 55	4 11	3 55	4 11	3 55	4 11	3 55	4 11	3 55
13 Sat	9 33	9 49	26 0	0	8 36	8 53	20 2	1 30	1 47	4 25	4 42	4 25	4 42	4 25	4 42	4 25	4 42	4 25
14 Sun	10 4	10 20	23 11	11	9 10	9 28	18 10	2 3	2 20	4 59	5 16	4 59	5 16	4 59	5 16	4 59	5 16	4 59
15 Mo	10 38	10 55	22 1	1	9 48	10 8	17 6	2 39	3 0	5 33	5 53	5 33	5 53	5 33	5 53	5 33	5 53	5 33
16 Tu	11 15	11 43	20 3	3	10 30	10 58	16 3	3 22	3 46	6 15	6 38	6 15	6 38	6 15	6 38	6 15	6 38	6 15
17 Wd	..	0 15	18 8	8	11 25	11 57	15 1	4 19	4 56	7 3	7 36	7 3	7 36	7 3	7 36	7 3	7 36	7 3
18 Th	0 50	1 29	18 10	10	..	0 32	15 3	5 35	6 19	8 12	8 52	8 12	8 52	8 12	8 52	8 12	8 52	8 12
19 Fri	2 9	2 48	20 7	7	1 13	1 56	16 5	7 2	7 40	9 32	10 12	9 32	10 12	9 32	10 12	9 32	10 12	9 32
20 Sat	3 22	3 56	23 6	6	2 32	3 4	18 6	8 11	8 39	10 50	11 23	10 50	11 23	10 50	11 23	10 50	11 23	10 50
21 Sun	4 26	4 55	26 9	9	3 32	3 58	20 9	9 3	9 26	11 52	..	11 52	..	11 52	..	11 52	..	11 52
22 Mo	5 23	5 47	29 5	5	4 25	4 48	22 7	9 48	10 7	0 17	0 40	0 17	0 40	0 17	0 40	0 17	0 40	0 17
23 Tu	6 11	6 37	31 6	6	5 12	5 38	24 2	10 27	10 50	1 3	1 24	1 3	1 24	1 3	1 24	1 3	1 24	1 3
24 Wd	7 1	7 25	32 6	6	6 1	6 24	24 9	11 12	11 34	1 45	2 7	1 45	2 7	1 45	2 7	1 45	2 7	1 45
25 Th	7 47	8 8	33 2	2	6 45	7 7	25 2	11 56	..	2 28	2 50	2 28	2 50	2 28	2 50	2 28	2 50	2 28
26 Fri	8 32	8 53	32 6	6	7 31	7 52	24 9	0 18	0 42	3 11	3 32	3 11	3 32	3 11	3 32	3 11	3 32	3 11
27 Sat	9 16	9 37	31 2	2	8 16	8 40	23 10	1 4	1 28	3 55	4 16	3 55	4 16	3 55	4 16	3 55	4 16	3 55
28 Sun	10 0	10 22	28 7	7	9 6	9 30	22 1	1 51	2 16	4 40	5 3	4 40	5 3	4 40	5 3	4 40	5 3	4 40
29 Mo	10 43	11 6	26 0	0	9 54	10 20	20 2	2 41	3 6	5 29	5 55	5 29	5 55	5 29	5 55	5 29	5 55	5 29
30 Tu	11 34	..	23 2	2	10 49	11 17	18 4	3 34	4 8	6 22	6 51	6 22	6 51	6 22	6 51	6 22	6 51	6 22
31 Wd	0 5	0 40	21 4	4	11 48	..	17 0	4 44	5 25	7 25	8 1	7 25	8 1	7 25	8 1	7 25	8 1	7 25

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

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PHASES OF THE MOON.

New Moon .. 6th, 10h. 24m. a.m. | Full Moon .. 21st, 10h. 14m. a.m.
 First Quarter. 15th, 2h. 7m. p.m. | Last Quarter.. 28th, 3h. 4m. a.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday.	..	0	29	22	5		1	37	2	20	9	1
2	Friday ..	1	10	1	50	23	2	2	58	3	36	10	0
3	Saturday..	2	23	2	51	24	3	4	9	4	40	11	4
4	Sunday ..	3	17	3	43	25	3	5	9	5	36	12	7
5	Monday..	4	5	4	26	26	0	5	58	6	20	13	6
6	Tuesday..	4	46	5	5	26	6	6	39	6	59	14	2
7	Wednesdy	5	24	5	41	26	7	7	19	7	36	14	3
8	Thursday.	5	57	6	15	26	8	7	54	8	11	14	4
9	Friday ..	6	30	6	48	26	5	8	26	8	43	14	1
10	Saturday..	7	4	7	18	26	0	9	0	9	14	13	6
11	Sunday ..	7	34	7	54	25	4	9	29	9	47	12	8
12	Monday..	8	11	8	29	24	8	10	3	10	19	11	10
13	Tuesday..	8	48	9	7	23	10	10	36	10	52	10	10
14	Wednesdy	9	28	9	52	23	0	11	11	11	32	9	9
15	Thursday.	10	19	10	48	22	3	11	58	..	8	10	
16	Friday ..	11	18	11	50	22	2	0	30	1	5	8	9
17	Saturday..	..	0	26	22	9		1	40	2	17	9	6
18	Sunday ..	1	5	1	41	23	10	2	53	3	27	10	10
19	Monday..	2	14	2	44	25	5	4	0	4	31	12	10
20	Tuesday..	3	9	3	38	26	10	5	0	5	31	14	7
21	Wednesdy	4	8	4	34	28	2	6	1	6	28	16	3
22	Thursday.	5	2	5	26	28	7	6	56	7	21	16	9
23	Friday ..	5	51	6	17	29	0	7	47	8	13	17	3
24	Saturday..	6	41	7	3	28	10	8	37	8	59	17	1
25	Sunday ..	7	29	7	55	28	3	9	24	9	48	16	4
26	Monday..	8	19	8	44	27	2	10	10	10	32	15	0
27	Tuesday..	9	7	9	32	25	9	10	53	11	14	13	3
28	Wednesdy	9	55	10	21	24	6	11	35	..	11	8	
29	Thursday.	10	47	11	16	23	2	0	1	0	32	10	0
30	Friday ..	11	46	..	22	6		1	4	1	36	9	2

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 6th, 10h. 24m. a.m. | Full Moon .. 21st, 10h. 14m. a.m.
 First Quarter. 15th, 2h. 7m. p.m. | Last Quarter. 28th, 3h. 4m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.					Cardiff.					Gloucester.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H. M.	H. M.	F. I.			H. M.	H. M.	F. I.			H. M.	H. M.	F. I.		
1	Thursday	0 22	1 4	15	7		1 9	1 52	22	4		2 2	2 45	18	5	
2	Friday ..	1 45	2 25	16	6		2 30	3 8	23	6		3 23	4 1	19	11	
3	Saturday..	2 58	3 26	17	10		3 41	4 12	25	2		4 34	5 5	21	11	
4	Sunday ..	3 52	4 18	19	1		4 41	5 8	26	9		5 34	6 1	23	11	
5	Monday..	4 40	5 1	20	0		5 30	5 52	28	0		6 23	6 45	25	5	
6	Tuesday..	5 21	5 40	20	8		6 11	6 31	28	9		7 4	7 24	26	5	
7	Wednesday	5 59	6 16	20	9		6 51	7 8	28	11		7 44	8 1	26	7	
8	Thursday.	6 32	6 50	20	10		7 26	7 43	29	0		8 19	8 36	26	9	
9	Friday ..	7 5	7 22	20	7		7 58	8 15	28	7		8 51	9 8	26	3	
10	Saturday..	7 39	7 53	20	0		8 32	8 46	28	0		9 25	9 39	25	5	
11	Sunday ..	8 9	8 29	19	2		9 1	9 19	26	11		9 54	10 12	24	1	
12	Monday..	8 46	9 4	18	4		9 35	9 51	25	10		10 28	10 44	22	9	
13	Tuesday..	9 23	9 42	17	4		10 8	10 24	24	6		11 1	11 17	21	2	
14	Wednesday	10 3	10 27	16	3		10 43	11 4	23	3		11 36	11 57	19	7	
15	Thursday..	10 54	11 22	15	4		11 30	..	22	1		..	0 23	18	2	
16	Friday ..	11 53	..	15	3		0 2	0 37	22	0		0 55	1 30	18	0	
17	Saturday..	0 25	1 1	16	0		1 12	1 49	22	10		2 5	2 42	19	1	
18	Sunday ..	1 40	2 16	17	4		2 25	2 59	24	6		3 18	3 52	21	2	
19	Monday..	2 49	3 19	19	4		3 32	4 3	27	0		4 25	4 56	24	3	
20	Tuesday..	3 44	4 13	21	1		4 38	5 3	29	3		5 25	5 56	27	1	
21	Wednesday	4 43	5 9	22	9		5 33	6 0	31	4		6 26	6 53	29	8	
22	Thursday.	5 37	6 1	23	3		6 28	6 53	31	11		7 21	7 46	30	5	
23	Friday ..	6 26	6 52	23	9		7 19	7 45	32	7		8 12	8 38	31	3	
24	Saturday..	7 16	7 38	23	7		8 9	8 31	32	4		9 2	9 24	30	11	
25	Sunday ..	8 4	8 30	22	10		8 56	9 20	31	5		9 49	10 13	29	9	
26	Monday..	8 54	9 19	21	6		9 42	10 4	29	9		10 35	10 57	27	9	
27	Tuesday..	9 42	10 7	19	9		10 25	10 46	27	6		11 17	11 39	24	11	
28	Wednesday	10 30	10 56	18	2		11 7	11 33	25	6		11 59	..	22	5	
29	Thursday.	11 23	11 51	16	6		..	0 4	23	6		0 26	0 57	19	11	
30	Friday ..	..	0 21	15	8		0 36	1 8	22	6		1 29	2 1	18	7	

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 6th, 10h. 24m. a.m. | Full Moon .. 21st, 10h. 14m. a.m.
 First Quarter. 15th, 2h. 7m. p.m. | Last Quarter. 28th, 3h. 4m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday..	..	0	39	15	9		0	32	1	14	16	3
2	Friday ..	1	20	2	0	16	7	1	55	2	35	17	1
3	Saturday..	2	33	3	1	17	9	3	8	3	36	18	3
4	Sunday ..	3	27	3	53	18	10	4	2	4	28	19	4
5	Monday..	4	15	4	36	19	8	4	50	5	11	20	2
6	Tuesday..	4	56	5	15	20	2	5	31	5	50	20	8
7	Wednesdy	5	34	5	51	20	3	6	9	6	26	20	9
8	Thursday.	6	7	6	25	20	4	6	42	7	0	20	10
9	Friday ..	6	40	6	58	20	1	7	15	7	32	20	7
10	Saturday..	7	14	7	28	19	8	7	49	8	3	20	2
11	Sunday ..	7	44	8	4	18	11	8	19	8	39	19	5
12	Monday..	8	21	8	39	18	2	8	56	9	14	18	8
13	Tuesday..	8	58	9	17	17	4	9	33	9	52	17	10
14	Wednesdy	9	38	10	2	16	4	10	13	10	37	16	10
15	Thursday.	10	29	10	58	15	7	11	4	11	32	16	1
16	Friday ..	11	28	12	0	15	6	..	0	3	16	0	
17	Saturday..	..	0	36	16	1		0	35	1	11	16	7
18	Sunday ..	1	15	1	51	17	4	1	50	2	26	17	10
19	Monday..	2	24	2	54	19	0	2	59	3	29	19	6
20	Tuesday..	3	19	3	48	20	7	3	54	4	23	21	1
21	Wednesdy	4	18	4	44	22	0	4	53	5	19	22	6
22	Thursday.	5	12	5	36	22	6	5	47	6	11	23	0
23	Friday ..	6	1	6	27	22	11	6	36	7	2	23	5
24	Saturday .	6	51	7	13	22	9	7	26	7	48	23	3
25	Sunday ..	7	39	8	5	22	1	8	14	8	40	22	7
26	Monday..	8	29	8	54	20	11	9	4	9	29	21	5
27	Tuesday..	9	17	9	42	19	5	9	52	10	17	19	11
28	Wednesdy	10	5	10	31	18	0	10	40	11	6	18	6
29	Thursday.	10	57	11	26	16	7	11	33	..	17	1	
30	Friday ..	11	56	..	15	10		0	1	0	31	16	4

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 6th, 10h. 24m. a.m. | Full Moon .. 21st, 10h. 14m. a.m.
 First Quarter. 15th, 2h. 7m. p.m. | Last Quarter. 28th, 3h. 4m. a.m.

M. D.	W. D.	Newport.				Swansea.				Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Th	1 17	2 0	20	9	0 22	1 4	16	7	6 6	6 53	8 41	9 21				
2	Fri	2 38	3 16	22	1	1 45	2 25	17	6	7 31	8 5	10 3	10 40				
3	Sat	3 49	4 20	23	11	2 58	3 26	18	10	8 33	8 59	11 17	11 46				
4	Sun	4 49	5 16	25	10	3 52	4 18	20	1	9 21	9 42	..	0 12				
5	Mo	5 38	6 0	27	3	4 40	5 1	21	0	10 0	10 18	0 35	0 57				
6	Tu	6 19	6 39	28	1	5 21	5 40	21	8	10 34	10 52	1 16	1 35				
7	Wd	6 59	7 16	28	3	5 59	6 16	21	9	11 10	11 26	1 52	2 9				
8	Th	7 34	7 51	28	4	6 32	6 50	21	10	11 43	12 0	2 26	2 42				
9	Fri	8 6	8 23	27	11	7 5	7 22	21	7	..	0 16	2 58	3 15				
10	Sat	8 40	8 54	27	3	7 39	7 53	21	0	0 33	0 51	3 30	3 46				
11	Sun	9 9	9 27	26	0	8 9	8 29	20	2	1 5	1 21	4 3	4 17				
12	Mo	9 43	9 59	24	9	8 46	9 4	19	4	1 40	1 56	4 33	4 52				
13	Tu	10 16	10 32	23	2	9 23	9 42	18	4	2 14	2 34	5 9	5 27				
14	Wd	10 51	11 12	21	10	10 3	10 27	17	3	2 53	3 16	5 47	6 8				
15	Th	11 38	..	20	5	10 54	11 22	16	4	3 42	4 14	6 32	6 59				
16	Fri	0 10	0 45	20	3	11 53	..	16	3	4 51	5 30	7 31	8 7				
17	Sat	1 20	1 57	21	4	0 25	1 1	17	0	6 10	6 50	8 47	9 24				
18	Sun	2 33	3 7	23	2	1 40	2 16	18	4	7 26	7 57	10 0	10 35				
19	Mo	3 40	4 11	26	1	2 49	3 19	20	4	8 26	8 52	11 8	11 38				
20	Tu	4 40	5 11	28	7	3 44	4 13	22	1	9 14	9 38	..	0 5				
21	Wd	5 41	6 8	31	1	4 43	5 9	23	9	10 3	10 25	0 28	0 53				
22	Th	6 36	7 1	31	8	5 37	6 1	24	3	10 49	11 12	1 19	1 42				
23	Fri	7 27	7 53	32	6	6 26	6 52	24	9	11 36	..	2 6	2 28				
24	Sat	8 17	8 39	32	2	7 16	7 38	24	7	0 3	0 27	2 52	3 17				
25	Sun	9 4	9 28	31	2	8 4	8 30	23	10	0 50	1 16	3 40	4 2				
26	Mo	9 50	10 12	29	3	8 54	9 19	22	6	1 41	2 4	4 28	4 53				
27	Tu	10 33	10 54	26	9	9 42	10 7	20	9	2 29	2 53	5 17	5 42				
28	Wd	11 15	11 41	24	4	10 30	10 56	19	2	3 20	3 46	6 8	6 36				
29	Th	..	0 12	22	1	11 23	11 51	17	6	4 17	4 53	7 3	7 34				
30	Fri	0 44	1 16	20	11	..	0 21	16	8	5 28	6 5	8 9	8 45				

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 6th, 5h. 25m. a.m. | Full Moon .. 21st, 8h. 34m. p.m.
 First Quarter. 14th, 4h. 43m. a.m. | Last Quarter. 28th, 7h. 23m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Saturday ..	0	20	0	58	22	7	2	12	2	47	9	3
2	Sunday ..	1	34	2	9	23	3	3	21	3	55	10	1
3	Monday ..	2	39	3	7	24	4	4	26	4	57	11	5
4	Tuesday ..	3	31	3	55	24	10	5	24	5	48	12	1
5	Wednesday	4	18	4	39	25	4	6	12	6	33	12	8
6	Thursday ..	5	0	5	19	25	9	6	54	7	14	13	3
7	Friday ..	5	39	5	55	25	10	7	34	7	51	13	4
8	Saturday ..	6	13	6	29	26	0	8	9	8	24	13	6
9	Sunday ..	6	46	7	3	25	11	8	42	8	59	13	5
10	Monday ..	7	20	7	37	25	8	9	16	9	32	13	1
11	Tuesday ..	7	55	8	13	25	3	9	48	10	4	12	7
12	Wednesday	8	34	8	55	24	9	10	23	10	40	12	0
13	Thursday ..	9	11	9	32	24	2	10	56	11	14	11	3
14	Friday ..	9	54	10	19	23	6	11	34	11	58	10	5
15	Saturday ..	10	44	11	11	23	0	..	0	27	9	9	..
16	Sunday ..	11	40	..	23	0	0	0	58	1	29	9	9
17	Monday ..	0	13	0	50	23	8	2	5	2	40	10	7
18	Tuesday ..	1	30	2	8	24	9	3	16	3	51	12	0
19	Wednesday	2	38	3	11	26	0	4	25	5	1	13	6
20	Thursday ..	3	39	4	11	27	3	5	32	6	5	15	1
21	Friday ..	4	41	5	11	27	2	6	35	7	5	15	0
22	Saturday ..	5	40	6	5	28	6	7	35	8	2	16	8
23	Sunday ..	6	31	6	55	28	8	8	27	8	51	16	10
24	Monday ..	7	19	7	42	28	3	9	15	9	37	16	4
25	Tuesday ..	8	6	8	29	27	6	9	58	10	19	15	5
26	Wednesday	8	52	9	12	26	6	10	39	10	57	14	2
27	Thursday ..	9	34	9	54	25	3	11	16	11	34	12	7
28	Friday ..	10	16	10	37	24	1	11	56	..	11	2	11
29	Saturday ..	11	0	11	26	23	0	0	19	0	45	9	9
30	Sunday ..	11	57	..	22	3	1	1	14	1	48	8	10
31	Monday ..	0	33	1	12	22	2	2	23	3	1	8	9

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 6th, 5h. 25m. a.m. | Full Moon .. 21st, 8h. 34m. p.m.
 First Quarter. 14th, 4h. 43m. a.m. | Last Quarter. 28th, 7h. 23m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.						Cardiff.						Gloucester.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Saturday .	0	55	1	33	15	9	1	44	2	19	22	7	2	37	3	12	18	9
2	Sunday ..	2	9	2	44	16	7	2	53	3	27	23	8	3	46	4	20	20	1
3	Monday..	3	14	3	42	17	11	3	58	4	29	25	3	4	51	5	22	22	1
4	Tuesday..	4	6	4	30	18	7	4	56	5	20	26	1	5	48	6	13	23	1
5	Wednesdy	4	53	5	14	19	2	5	44	6	5	26	11	6	37	6	58	24	1
6	Thursday.	5	35	5	54	19	9	6	26	6	46	27	6	7	19	7	39	24	11
7	Friday ..	6	14	6	30	19	10	7	6	7	23	27	8	7	59	8	16	25	1
8	Saturday..	6	47	7	3	20	0	7	41	7	56	28	0	8	34	8	49	25	5
9	Sunday ..	7	21	7	38	19	11	8	14	8	31	27	10	9	7	9	24	25	3
10	Monday..	7	55	8	12	19	7	8	48	9	4	27	5	9	41	9	57	24	9
11	Tuesday..	8	30	8	48	19	1	9	20	9	36	26	9	10	13	10	29	23	11
12	Wednesday	9	9	9	28	18	6	9	55	10	12	26	0	10	48	11	5	23	0
13	Thursday.	9	46	10	7	17	9	10	28	10	46	25	0	11	21	11	39	21	9
14	Friday ..	10	29	10	54	16	11	11	6	11	30	24	0	11	59	..	20	6	
15	Saturday..	11	19	11	46	16	3	11	59	..	23	3	0	0	23	0	52	19	7
16	Sunday ..	..	0	15	16	3	0	0	30	1	1	23	3	1	23	1	54	19	7
17	Monday..	0	48	1	25	17	1	1	37	2	12	24	3	2	30	3	5	20	10
18	Tuesday..	2	5	2	41	18	6	2	48	3	23	26	0	3	41	4	16	23	0
19	Wednesday	3	13	3	46	20	0	3	57	4	33	28	0	4	50	5	26	25	5
20	Thursday.	4	14	4	46	21	7	5	4	5	37	29	11	5	57	6	30	27	11
21	Friday ..	5	16	5	46	21	6	6	7	6	37	29	9	7	0	7	30	27	9
22	Saturday..	6	15	6	40	23	2	7	7	7	34	31	9	8	0	8	27	30	3
23	Sunday ..	7	6	7	30	23	4	8	0	8	23	32	0	8	52	9	16	30	7
24	Monday..	7	54	8	17	22	10	8	47	9	9	31	5	9	40	10	2	29	9
25	Tuesday..	8	41	9	4	21	11	9	30	9	51	30	4	10	23	10	44	28	5
26	Wednesday	9	27	9	47	20	8	10	11	10	29	28	9	11	4	11	22	26	5
27	Thursday.	10	9	10	29	19	1	10	48	11	6	26	9	11	41	11	59	23	11
28	Friday ..	10	51	11	12	17	8	11	28	11	51	24	11	..	0	21	21	7	
29	Saturday..	11	35	..	16	3	..	..	0	17	23	3	0	0	44	1	10	19	7
30	Sunday ..	0	1	0	32	15	4	0	46	1	20	22	1	1	39	2	13	18	2
31	Monday..	1	8	1	47	15	3	1	55	2	33	22	0	2	48	3	30	18	0

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 6th, 5h. 25m. a.m. | Full Moon .. 21st, 8h. 34m. p.m.
 First Quarter. 14th, 4h. 43m. a.m. | Last Quarter. 28th, 7h. 23m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Saturday..	0	30	1	8	15	11	1	5	1	43	16	5
2	Sunday ..	1	44	2	19	16	8	2	19	2	54	17	2
3	Monday..	2	49	3	17	17	10	3	24	3	52	18	4
4	Tuesday..	3	41	4	5	18	5	4	16	4	40	18	11
5	Wednesday	4	28	4	49	18	11	5	3	5	24	19	5
6	Thursday.	5	10	5	29	19	5	5	45	6	5	19	11
7	Friday ..	5	49	6	5	19	6	6	24	6	40	20	0
8	Saturday..	6	23	6	39	19	8	6	57	7	13	20	2
9	Sunday ..	6	56	7	13	19	7	7	31	7	48	20	1
10	Monday..	7	30	7	47	19	3	8	5	8	22	19	9
11	Tuesday..	8	5	8	23	18	10	8	40	8	58	19	4
12	Wednesday	8	44	9	5	18	4	9	19	9	38	18	10
13	Thursday.	9	21	9	42	17	8	9	56	10	17	18	2
14	Friday ..	10	4	10	29	16	11	10	39	11	4	17	5
15	Saturday..	10	54	11	21	16	4	11	29	11	56	16	10
16	Sunday ..	11	50	..	..	16	4	..	0	25	16	10	..
17	Monday..	0	23	1	0	17	1	0	58	1	35	17	7
18	Tuesday..	1	40	2	18	18	4	2	15	2	51	18	10
19	Wednesday	2	48	3	21	19	8	3	23	3	56	20	2
20	Thursday.	3	49	4	21	21	0	4	24	4	56	21	6
21	Friday ..	4	51	5	21	20	11	5	26	5	56	21	5
22	Saturday..	5	50	6	15	22	5	6	25	6	50	22	11
23	Sunday ..	6	41	7	5	22	7	7	16	7	40	23	1
24	Monday..	7	29	7	52	22	1	8	4	8	27	22	7
25	Tuesday..	8	16	8	39	21	4	8	51	9	14	21	10
26	Wednesday	9	2	9	22	20	2	9	37	9	57	20	8
27	Thursday.	9	44	10	4	18	10	10	19	10	39	19	4
28	Friday ..	10	26	10	47	17	7	11	1	11	22	18	1
29	Saturday..	11	10	11	36	16	4	11	45	..	..	16	10
30	Sunday ..	..	0	7	15	7	7	0	11	0	42	16	1
31	Monday..	0	43	1	22	15	6	1	18	1	57	16	0

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 6th, 5h. 25m. a.m. | Full Moon .. 21st, 8h. 34m. p.m.
 First Quarter. 14th, 4h. 43m. a.m. | Last Quarter. 28th, 7h. 23m. p.m.

M. D.	W. D.	Newport.					Swansea.					Liverpool.				London.			
		Morn.		Even.		Height	Morn		Even.		Height	Morn.		Even.		Morn.		Even.	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.
1	Sat	1	52	2	27	21	0	0	55	1	33	16	9	6	45	7	20	9	20
2	Sun	3	1	3	35	22	3	2	9	2	44	17	7	7	51	8	22	10	29
3	Mo	4	6	4	37	24	0	3	14	3	42	18	11	8	48	9	12	11	34
4	Tu	5	4	5	28	25	0	4	6	4	30	19	7	9	33	9	51	0	1
5	Wd	5	52	6	13	26	0	4	53	5	14	20	2	10	11	10	28	0	47
6	Th	6	34	6	54	26	9	5	35	5	54	20	9	10	47	11	6	1	28
7	Fri	7	14	7	31	26	11	6	14	6	30	20	10	11	24	11	41	2	4
8	Sat	7	49	8	4	27	3	6	47	7	3	21	0	11	58	..	..	2	40
9	Sun	8	22	8	39	27	1	7	21	7	38	20	11	0	14	0	32	3	13
10	Mo	8	56	9	12	26	7	7	55	8	12	20	7	0	50	1	7	3	45
11	Tu	9	28	9	44	25	10	8	30	8	48	20	1	1	24	1	41	4	19
12	Wd	10	3	10	20	24	11	9	9	9	28	19	6	1	58	2	19	4	53
13	Th	10	36	10	54	23	9	9	46	10	7	18	9	2	39	2	58	5	32
14	Fri	11	14	11	38	22	8	10	29	10	54	17	11	3	20	3	45	6	13
15	Sat	..	0	7	21	10	10	11	19	11	46	17	3	4	14	4	48	7	2
16	Sun	0	38	1	9	21	10	..	0	15	17	3	3	5	22	5	57	8	4
17	Mo	1	45	2	20	22	11	0	48	1	25	18	1	6	37	7	13	9	13
18	Tu	2	56	3	31	24	11	2	5	2	41	19	6	7	48	8	19	10	22
19	Wd	4	5	4	41	27	3	3	13	3	46	21	0	8	47	9	15	11	31
20	Th	5	12	5	45	29	5	4	14	4	46	22	7	9	39	10	6	..	0
21	Fri	6	15	6	45	29	3	5	16	5	46	22	6	10	30	10	58	0	54
22	Sat	7	15	7	42	31	6	6	15	6	40	24	2	11	25	11	51	1	48
23	Sun	8	7	8	31	31	10	7	6	7	30	24	4	..	0	17	..	2	41
24	Mo	8	55	9	17	31	2	7	54	8	17	23	10	0	41	1	6	3	31
25	Tu	9	38	9	59	29	11	8	41	9	4	22	11	1	29	1	52	4	18
26	Wd	10	19	10	37	28	1	9	27	9	47	21	8	2	14	2	37	5	4
27	Th	10	56	11	14	25	10	10	9	10	29	20	1	2	59	3	23	5	51
28	Fri	11	36	11	59	23	8	10	51	11	12	18	8	3	45	4	11	6	39
29	Sat	..	0	25	21	10	10	11	35	..	17	3	3	4	38	5	8	7	28
30	Sun	0	54	1	28	20	5	0	1	0	32	16	4	5	40	6	18	8	24
31	Mo	2	3	2	41	20	3	1	8	1	47	16	3	6	56	7	39	9	31

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PORT CHARGES, &c.

APPLEDORE.

Mooring, 1s.

Pilotage, as per agreement.

BARNSTAPLE.

Keelage, 4d. per ton register.

Pilotage, as per agreement.

BIDEFORD.

Harbour Dues.—Vessels discharging at public quay, $\frac{1}{2}$ d. per ton register; at private wharf, 2s. 6d. Pilotage, as per agreement.

BRIDGEWATER.

Pilotage.

From the extreme limits of the navigation in the Bristol Channel, or from any point between such extreme limits and Burnham Church, to the Town or to any point between the Black Rock and the Town, the vessel being safely moored; also from the Town to the limits of the navigation, or to any point between Burnham Church and the said limits, the following Rates, viz:—

			£	s.	d.
On vessels of 30 tons and under	.....		0	6	6
On vessels above 30 tons and under	50 tons.		0	8	0
"	50	"	65	10	0
"	65	"	80	12	6
"	80	"	100	15	0
"	100	"	120	1	0
"	120	"	150	11	0
"	150	"	200	11	0
"	200	"	300	3	6
"	300	"	.....	4	1

Bridgewater, continued.

From Burnham Church, or from any point between Burnham Church and the Town, to the Town, or to any intermediate point, the vessel being safely moored, and *vice versa*.

	£	s.	d.
On vessels of 30 tons and under	0	4	6
On vessels above 30 tons and under 50 tons.	0	5	6
" 50 " 65	0	6	6
" 65 " 80	0	7	6
" 80 " 100	0	8	6
" 100 " 120	0	10	6
" 120 " 150	1	6	0
" 150 " 200	2	1	0
" 200 " 300	2	11	0
" 300 " 	3	4	0

The above Rates are subject to a reduction of one-fourth part in respect of vessels towed by steam vessels.

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first-mentioned ships shall, by any order of Her Majesty's Most Honourable Privy Council be privileged to enter the ports of this kingdom, upon paying the same Dues of Tonnage as are paid by British ships; in which case, such ships and vessels not having British registers, shall pay the like Rates of Pilotage only, as are payable by ships having British registers.

If a master choose to employ a pilot for a tide in the navigation, the pilot shall be entitled to receive for such service, two shillings and sixpence for each tide.

Towage.

To or from Burnham, Black Rock, or any intermediate Place, where a vessel shall stop or get aground (*for one tide only*;) viz:—
Vessels—Light, under one hundred tons register, 3d. per ton; ditto above, 4d. per ton. (If any goods, 1d. per ton extra.)

Vessels with coal or culm, under 10 feet of water, 3d. per ton; 10 feet, 4d. per ton; 12 feet, 5d. per ton.

Vessels with merchandize, or ballast, 4d. per ton; 10 feet of water, 5d. per ton; 11 feet, 6d. per ton; 12 feet, 7d. per ton.

To or from the Gore to Burnham, or any intermediate place, 3d. per ton. To or from Burnham to Cumbwitch, or any intermediate place, 3d. per ton.

Two-pence per ton over the above Rates will be charged for towing up, in all cases where other tugs are employed to tow down.

Should any vessel require a tug, or aid for more than one tide, such assistance must be paid for in addition to the above Rates, according to the services rendered.

Harbour Dues.

One penny per ton register, with 1s. fee for moorage.

*Bridgewater, continued.***Tonnage Rates.**

First Class—Vessels entering with cargoes or departing with cargoes—s.

INWARDS. —For every ship or other vessel which shall enter the said basin, from any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney, and Sark—per ton measurement ..	0
From any other part of Europe except places within the Straits of Gibraltar, and round the North Cape, and from all British Colonies—per ton measurement ..	0
From any port or place in Europe round the North Cape, any port or place within the Straits of Gibraltar whether in Europe, Asia, or Africa, and any port or place in the United States of America—per ton measurement	0
From any port or place in any other part of the world—per ton measurement	0
OUTWARDS. —For every ship or vessel which shall depart from the said basin to any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney, and Sark—per ton measurement ..	1
To any other port of Europe except places within the Straits of Gibraltar, and round the North Cape, or to any British Colony,—per ton measurement	0
To any port or place in Europe round the North Cape, any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa; any port or place in the United States of America—per ton measurement ..	0 6
To any port or place in any part of the world—per ton measurement	0 8
<i>Second Class</i> —Vessels entering without cargoes or in ballast	
For every ship or other vessel which shall enter into the said basin—per ton measurement	0 2
<i>Third Class</i> —For every ship or other vessel with a cargo which shall enter the said basin and depart therefrom without breaking bulk, or which shall discharge and afterwards take on board and depart with the same cargo—per ton measurement	0 4
And in estimating the dues contained in the schedule, every vessel of less burthen than twenty tons measurement, shall be rated at twenty tons measurement.	
Extra basin dues for overtime—For every coal vessel remaining in the basin beyond ten days, for every coasting vessel beyond fourteen days, and for every foreign vessel beyond thirty days from the time of their respectively entering the same—per ton measurement, per month..	0 2

BRISTOL.

Rates or Fares for Pilotage.

	If 80 and under 100 tons.		If 100 and under 200 tons.		If 200 and under 300 tons.		If 300 and under 500 tons.		If 500 and under 800 tons.		If 800 and under 1000 tons.		If 1000 tons and upwards.	
	£.	s. d.	£.	s.	£.	s. d.	£.	s. d.	£.	s.	£.	s. d.	£.	s.
BETWEEN														
Lundy and Coombe	1	1 0	1 8		1 15	0	2 2		2 16		3 3	0	3 10	
Lundy and Swansea or Minehead	2	2 0	2 16		3 10	0	4 4		5 12		6 6	0	7 0	
Lundy and Bridgewater, Cardiff, or the Holmes	2	12 6	3 10		4 7	6	5 5		7 0		7 17	6	8 15	
Lundy and Newport or Kingroad	3	3 0	4 4		5 5	0	6 6		8 8		9 9	0	10 10	
Coombe and Minehead	1	1 0	1 8		1 15	0	2 2		2 16		3 3	0	3 10	
Coombe and Bridgewater, Cardiff, or the Holmes	1	11 6	2 2		2 12	6	3 3		4 4		4 14	6	5 5	
Coombe and Newport or Kingroad	2	2 0	2 16		3 10	0	4 4		5 12		6 6	0	7 0	
Minehead and Bridgewater, Cardiff, or the Holmes	0	10 6	0 14		0 17	6	1 1		1 8		1 11	6	1 15	
Minehead and Newport or Kingroad ..	1	1 0	1 8		1 15	0	2 2		2 16		3 3	0	3 10	
Between any of the following places:— Portishead, Kingroad, Hungroad, Broad Pill, Cumberland or Bathurst Basins, and any other of such places*	0	10 0	0 15		1 0	0	1 5		1 15		2 0	0	2 5	
Between any two of the following places, viz:—Bridgewater, Cardiff, the Holmes, Newport and Kingroad	0	10 6	0 14		0 17	6	1 1		1 8		1 11	6	1 15	

* If under 80 tons, 7s. 6d.

*Bristol, continued.***Harbour Dues.**

£ s. d.

For every vessel trading from Africa, Honduras, Surinam, and other ports in South America, the United States of America, the East and West Indies, all the ports within the Straits of Gibraltar, the Southern Whale Fishery, the British Colonies, Portugal, Prussia, Russia, Spain, without the Straits, and Sweden—per ton	0	1	2
For every vessel trading from Flanders, France, without the Straits, Germany, Guernsey, Holland, Jersey, Norway, Poland, and Zealand—per ton	0	0	7
For every vessel trading from Ireland, the Isle of Man, Scotland, or as a Coaster, not including vessels from Cardiff, Newport, and other ports to the Eastward of the Holmes—per ton	0	0	5
For every vessel from Cardiff, Newport, or any other port to the Eastward of the Holmes (not being vessels one-third part of the lading of which shall consist of coal, scroff, iron, tin, tin plates, grain, copper, bricks, stone-coal, tar, slate, bark, timber, or wood,) as follows:—			
If such vessel shall be under forty tons burthen—for each voyage.. .. .	0	7	6
If such vessel shall be forty tons burthen, and under seventy-five tons—for each voyage	0	12	6
If such vessel shall be seventy-five tons burthen, and under one hundred tons—for each voyage	0	16	0
If such vessel shall be one hundred tons burthen or upwards—for each voyage.. .. .	1	1	0
For every vessel from Cardiff, Newport, or any other port to the Eastward of the Holmes, one-third part of the lading of which shall consist of coal, scroff, iron, tin, tin plates, grain, copper, bricks, stone-coal, tar, slate, bark, timber, or wood, as follows:—			
If such vessel shall not exceed seventy-five tons burthen—for each voyage	0	5	0
If such vessel shall exceed seventy-five tons burthen—for each voyage	0	7	6
N.B.—There are no Dock Rates or other Port Charges payable on vessels leaving the Port of Bristol.			

BRITON-FERRY.**Pilotage.**

From outside of Neath Bar.

Vessels under 40 tons register	7s.	0d.
Vessels over 40 and under 60 tons register	10s.	0d.
With or without Steam.		

Briton-Ferry, continued.

For vessels over 60 tons register the rates are as follows:—

Draught of Water.	Without Steam.	With Steam.	Draught of Water.	Without Steam.	With Steam.
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
8 feet..	0 11 3	0 8 5	13½ ft. ..	1 2 6	0 16 11
8½ „ ..	0 12 0	0 9 0	14 „ ..	1 8 0	1 1 0
9 „ ..	0 12 6	0 9 5	14½ „ ..	1 13 6	1 5 2
9½ „ ..	0 13 0	0 9 9	15 „ ..	2 1 6	1 11 2
10 „ ..	0 13 6	0 10 2	15½ „ ..	2 10 6	1 18 0
10½ „ ..	0 14 0	0 10 6	16 „ ..	3 1 0	2 5 9
11 „ ..	0 14 6	0 10 11	16½ „ ..	3 12 0	2 14 0
11½ „ ..	0 15 9	0 11 10	17 „ ..	4 5 6	3 4 2
12 „ ..	0 16 10	0 12 8	17½ „ ..	4 19 0	3 14 3
12½ „ ..	0 18 6	0 14 2	18 „ ..	5 13 0	4 5 0
13 „ ..	1 0 6	0 15 5	And 10s. for every ½ ft. over 18 ft.		

Towage.

Under 150 tons register.....	Inwards.....	1½d. per ton register
„ 150 „	Outwards	2d. „
Over 150 in and out.....		2d. „

Harbour Dues.

Coastwise or Foreign	1½d. per ton register
Layage	1s. 6d. each vessel

Loading Charges.

Trimming coal, on cargo.....	2½d. per ton
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Discharging Ballast.

Without reference to quantity—about 1½d. per ton on cargo.

BURRY PORT.**Harbour Dues.**

For every ship, barge, boat, or other vessel coming into or going out of the harbour of Burry Port, according to its tonnage, (except seeking freight,) the sum of fourpence per ton.

For every ship, barge, boat, or other vessel running into the inner harbour by stress of weather, and not unloading, the sum of sixpence per ton, and the outer harbour, the sum of fourpence per ton.

For every ship, barge, boat, or other vessel coming into the inner harbour from stress of weather, and lying longer than seven days, the sum of threepence per ton per day, and into the outer harbour the sum of twopence per ton per day.

Burry Port, continued.

For every ship, barge, boat, or other vessel coming into the outer harbour to seek a freight, of whatever tonnage, and not remaining beyond three days, the sum of one shilling.

For every day exceeding three days, one shilling per day.

Stemming Rates.

Vessels not exceeding 20 tons register, 6d.; 50 tons, 1s.; 70 tons, 1s. 6d.; 100 tons, 2s.; exceeding 100 tons, 2s. 6d.

Ballast.

For wheeling, per ton register, Outer Harbour, 1d.; Inner Harbour, 1½d.

For use of planks, barrows, and wagons—

	s.	d.		s.	d.
Not above 100 tons register	1	6	Not above 350 tons register	3	6
„ 150 „	2	0	„ 400 „	4	0
„ 200 „	2	6	Above 400 „	4	6
„ 300 „	3	0			

Men to be allowed 1s. for assisting to trip the basket, and the same extra charge for the use of crane and tubs, if required.

For Pilotage, see Llanelly.

BURNHAM.

Harbour Dues, 2d. per ton register **Beacons**, 4s. per vessel.

Pilotage, as per agreement.

CARDIFF.**Pilotage Rates. •**

The limit of this Pilotage is the Port of Cardiff and that portion of the Bristol Channel which lies eastward of Lundy Island, up to and including Kingroad and the River Rhymney to Rhymney Bridge. This Pilotage is not compulsory but may be obtained over all or any portion of this district, at the discretion of the Masters of Vessels.

Harbour Pilotage.—Every licensed pilot employed in taking a ship or vessel between any dock or harbour in the port of Cardiff and any point in Cardiff Roads, or *vice versa*, shall be paid according to the registered tonnage of such vessel, as follows:—

Cardiff, continued.

FOR LADEN VESSELS.			£	s.	d.
If under 60 tons.....			0	5	0
60 tons and under 100 tons			0	7	6
100 „ 150 tons			0	10	0
150 „ 200 tons			0	12	6
200 „ 250 tons			0	15	0
250 „ 300 tons			0	17	6
300 „ 400 tons			1	1	0
400 „ 500 tons			1	5	0
500 „ 600 tons			1	7	6
600 „ 800 tons			1	10	0
800 „ 1000 tons .. .			1	15	0
1000 „ 1250 tons			2	10	0
1250 tons and upwards			3	0	0

For all vessels in ballast, the charges to be one-fifth less than the above rates.

Channel Pilotage.—Any ship or vessel sailing to and from the port of Cardiff, upon or in the waters of the Bristol Channel between Lundy Island and Kingroad, for which the services of a duly licensed pilot may be required and rendered, shall pay according to the registered tonnage of such vessel, as follows:—

FOR LADEN VESSELS.

	1st Limit.			2nd Limit.			3rd Limit.		
	£	s.	d.	£	s.	d.	£	s.	d.
Under 150 tons	0	15	0	1	5	0	2	0	0
150 tons and under 200 tons....	0	17	6	1	10	0	2	7	6
200 „ 300 tons	1	0	0	1	17	6	2	17	6
300 „ 400 tons	1	5	0	2	5	0	3	5	0
400 „ 500 tons	1	7	6	2	10	0	3	10	0
500 „ 600 tons	1	10	0	2	15	0	4	0	0
600 „ 800 tons	1	15	0	3	0	0	4	7	6
800 „ 1000 tons	2	0	0	3	15	0	5	10	0
1000 „ 1250 tons	2	10	0	4	15	0	7	0	0
1250 tons and upwards.....	3	0	0	5	15	0	8	10	0

For all vessels in ballast, the charges to be one-fifth less than the above rates.

1st LIMIT.—Between Cardiff Roads and Nash or Kingroad, or any point east of Nash, and west of Kingroad.

2nd LIMIT.—Between Cardiff Roads and Combe, or any point west of Nash and east of Combe.

3rd LIMIT.—Between Cardiff Roads and Lundy Island, or any point west of Combe.

Any Pilot who may be required to remain on board any ship or vessel for the convenience of the captain, master, owner, or agent, after he shall have discharged the duties for which he was engaged, shall be paid ten shillings per day for every day he may be employed,

Cardiff, continued.

and any Pilot who may be required to move any ship or vessel from one dock or tidal harbour to another dock or tidal harbour, occupying only one tide, shall be paid for every ship

		s.	d.
Not exceeding 100 tons register.....		5	0
100 and not exceeding 300 " 		10	0
300 " 500 " 		12	6
500 " 800 " 		17	6
800 and upwards		25	0

Towage.

Inwards, in ballast	1½d. per ton register
" with cargo	2d. "
Outwards " 	2d. per ton

Town Dues.

Under 60 tons register	2s. 6d. per vessel
Above 60 tons register	5s. 0d. "

Loading Charges.

Trimming coal (single deck).....	2½d. per ton cargo
" (double deck)	8d. "
Wharfage on cargo	2d. "

Discharging Ballast.

Vessels under 200 tons.....	5d. per ton on quantity
200 tons and under 400 tons	6d. "
400 " 600 tons	7d. "
600 " 800 tons	8d. "
800 and upwards	9d. "

Tonnage Rates.—Bute Docks.

FIRST CLASS.—On all sailing or steam vessels entering with a		s.	d.
cargoes from or departing with cargoes for any part in the United Kingdom, Isle of Man, Jersey, Guernsey, Alderney, and Sark, under 100 tons register		per register ton	0 1½
100 tons and under 200 tons register.....		ditto	0 2
200 tons register and upwards (except steam vessels) ditto		ditto	0 3
Steam vessels 200 tons register and upwards.....		ditto	0 2
Rent, after three weeks from date of entrance,			
per register ton, per week		0	0½
SECOND CLASS.—On all sailing or steam vessels with cargoes from or departing with cargoes for any port in Europe, between the North Cape and Cape Finisterre, per register ton		s.	d.
Rent, after three weeks from date of entrance,		0	5
per register ton per week		0	0½
THIRD CLASS.—On all sailing or steam vessels with cargoes from or departing with cargoes for any port in Europe, and the Mediterranean		s.	d.
per register ton		0	7

Cardiff, continued.

Rent, after three weeks from date of entrance,

per register ton per week 0 0½

FOURTH CLASS.—On all sailing or steam vessels with cargoes from or departing with cargoes for all other foreign ports whatsoever per register ton 0 9

Rent, after three weeks from date of entrance,

per register ton per week 0 0½

FIFTH CLASS.—On all sailing or steam vessels entering light, or in ballast, and departing in ballast per register ton 0 3

Rent, after three weeks from date of entrance,

per register ton per week 0 0½

SIXTH CLASS.—On all sailing of steam vessels which shall enter laden, and depart without breaking bulk; or which shall discharge and re-load, and depart with the same cargo per register ton 0 6

Rent, after three weeks from date of entrance,

per register ton per week 0 0½

On every boat, barge, or other craft, which shall enter from the Glamorganshire Canal, and pass through the Dock into the Bristol Channel..... per register ton 0 6

On every ship, boat, barge, craft, lighter, or other vessel, which shall enter the ship canal, basin, or dock for the purpose of unloading from, or discharging goods, wares, and merchandise, on board of any ship, boat barge, craft, lighter or other vessel, being within the said ship canal, basin or dock; such and the like rates and duties, upon the goods so discharged or loaded, as are taken for wharfage rates, on goods to be landed or loaded upon, or from the wharfs, or quays, of the dock, basin, or jetties.

On all steam or other vessels, which do not enter within the sea gates of the docks, but which shall either discharge or receive passengers or goods, upon any of the piers, or jetties, outside those gates..... per register ton 0 2

Bute Tidal Harbour.

On all sailing or steam vessels, discharging or loading,

per register ton 0 0½

CARMARTHEN.**Harbour Dues.**

Vessels under 30 tons	1 0	Vessels 80 to 90 tons	2 6
30 to 60 tons	1 6	90 to 110 tons	3 0
60 to 80 tons	2 0	110 tons and upwards	5 0

Pilotage, as per agreement.

CHEPSTOW.**Harbour Dues.**

One penny per ton register, on all vessels loading or unloading alongside a wharf; also, on all vessels entering or departing the river, if from or to the eastward of the Holmes, 4d; from or to the westward of the Holmes, 2s. 4d.

Pilotage.—The same as Gloucester.

CLOVELLY.**Harbour Dues.**

Vessels not exceeding 20 tons, 1s.; 20 to 50 tons, 2s.; above 50 tons, 4d. per ton.

Pilotage, &c., as per agreement.

GLOUCESTER & BERKELEY CANAL.**Rates of Tonnage**

Charged upon GROSS and REGISTER weight, and on the ton of 20 cwt. of 112 lbs

IMPORTS.					Foreign.		Coastwise.	
					s.	d.	s.	d.
ALE, beer, porter, cider and perry, per brl. of 36 galls.					0	4	0	4
— ditto, in bottle .. ..	..	..	..	per dozen	0	1	0	1
Barilla, .. ..	..	..	..	per ton	1	6	1	0
Bricks, for building .. ..	..	..	..	per 1000	2	0	2	0
— scouring, fire, and tiles .. ..	..	..	..	per ton	2	0	1	0
Brimstone .. ..	..	..	..	..	1	6	1	0
Bones .. ..	..	..	..	..	1	0	1	0
Burr stones .. ..	..	..	..	..	1	6	1	0
Clay .. ..	..	..	..	..	0	6	0	6
Coals .. ..	..	..	..	..	0	6	0	6
CORN AND MEAL								
Wheat and all corn and seed .. ..	..	..	..	..	1	9	1	6
Flour and other meal .. ..	..	..	..	..	2	0	2	0
Bran and gurgeons .. ..	..	..	..	..	1	6	1	6
Earths .. ..	..	..	..	..	1	0	1	0
Gunpowder .. ..	..	..	..	..	5	0	5	0
Kelp .. ..	..	..	..	..	1	6	1	6
Marble .. ..	..	..	..	per ton of 14 cubic ft.	1	6	1	6
Manure .. ..	..	..	..	.. per ton	1	0	1	0
METALS AND ORES								
Copper, spelter, tin, zinc and manganese ..				..	2	0	0	9
Metallic ores .. ..	..	..	..	..	0	9	0	6
Pig iron, and old or loose iron .. ..	..	..	..	..	2	0	0	9
All other descriptions of iron .. ..	..	..	..	..	2	0	0	9

Gloucester and Berkeley Canal, continued.

IMPORTS, continued.

				Foreign.		Coasting	
				s.	d.	s.	d.
Oil cake	..	..	.. per ton	1	6	1	0
Oysters	..	..	per ton of 10 bushels	1	6	1	6
Potatoes	..	..	.. per ton	1	0	1	0
Slates, for roofing	..	..	.. "	2	0	1	6
— for draining	..	..	.. "	2	0	1	0
— slabs, for paving, &c.	..	..	.. "	2	0	1	0
Stone, for roads, pitching, lime, chalk, flint, gravel, and sand	..	..	.. "	0	6	0	6
— for building, block, paving, &c.	..	..	.. "	1	0	1	0
— burr stones	..	..	.. "	1	6	1	0
SPIRITS and wine	..	..	per pipe, pun. or butt	2	0	2	6
— ..	..	..	per half ditto, or hogshead	1	3	1	3
— ..	..	..	all casks under	0	6	0	6
— in bottle	..	..	per dozen	0	1	0	1
WOOD AND WOOD GOODS							
Mahogany and fine woods*	..	..	.. per ton	2	0	2	0
Other timber and poles†	..	..	.. "	1	6	1	6
Lathwood	..	..	.. per fathom of 4 feet	2	0	2	0
Deals and battens, per Petersburg standard of 120, 12 ft. long, 11 in. wide, and 1½ in. thick	..	..	..	3	4	3	4
Staves, Baltic pipe	..	..	.. per 120	3	6	3	6
— Puncheon and hogshead	..	..	.. "	3	0	3	0
— Quebec standard	..	..	.. "	1	6	1	6
— Barrel	..	..	.. "	1	0	1	0
— West India Pun.	..	..	.. "	0	6	0	6
— New Brunswick small	..	..	.. "	0	3	0	3
Laths..	..	..	.. per 1000	0	4	4	4
UNENUMERATED ARTICLES	..	..	.. per ton	2	0	1	0

EXPORTS

Bark	..	..	.. per ton	0	6	1	0
Brick of all kinds	..	..	.. "	0	6	0	6
Clays	..	..	.. "	0	6	0	6
Coals	..	..	.. "	0	6	0	6
Corn, flour, and meal	..	..	.. "	0	6	0	6
METALS AND ORES							
Metallic ores	..	..	.. "	0	6	0	6
"Puddle bars," Pig iron, and rough cast-iron pipes	..	..	.. "	0	6	0	6
All other description of iron and metals	..	..	.. "	0	6	0	9
Salt	..	..	.. "	0	6	0	6
UNENUMERATED ARTICLES	..	..	.. "	0	6	1	0

* Mahogany, Oak, Ash, Elm, Beech, and other heavy Timber or Wood 40 feet to the ton.

† Fir, Pine, Deal and light Woods, 50 feet to the ton.

*Gloucester and Berkeley Canal, continued.***Regulations.**

Tonnage.—One half of the above Rates shall be charged upon goods conveyed along any part of the canal between the Stroud Junction and Sharpness Point, or the Stroud Junction and Gloucester, excepting goods coming under the operation of the 8th, 9th, or 10th regulations.

If it be proved to the satisfaction of the toll collectors that the full rate of tonnage has been paid upon any goods which have passed along the canal, half the full tonnage only shall be charged on such goods repassing along the canal, unless such half rate shall exceed the amount of the export rate, in which case the export rate upon such goods shall be charged.

All goods brought into the canal for sale, and not sold, and then exported in the same bottom, without being landed, shall only be charged with the import rate.

All goods exported in the same bottom, or transhipped for export, shall be charged with the import rate.

All goods brought into the canal, forming part of a cargo, the original destination of such goods being for any other port than Gloucester, and not landed nor transhipped, shall pass in and out of the canal free of charge, the vessel carrying such goods paying lockage.

All vessels partly laden entering the canal at Sharpness or Gloucester, to complete their cargoes, shall only be charged tonnage rates on the merchandize shipped in the canal, and the usual lockage charges; provided such inward lading is not landed nor transhipped.

All goods brought into the canal at Gloucester or Sharpness, either by land or water conveyance, and intended for exportation, shall not be charged the tonnage rates until shipped.

All Corn brought to Gloucester from Stroud by the canal shall pay a rate of 4d. per ton, and all Flour, Bran, and Gurgeons so brought shall pay a rate of 6d. per ton.

All goods brought into the canal at Gloucester, by the Severn, from places above Gloucester, or to the docks at Gloucester, by land carriage, and not conveyed upon the canal below Hempstead Bridge, except goods coming under the 10th regulation, shall pay a rate of 4d. per ton, or the rate by the table, if it be less than 4d.

All goods simply crossing the canal from the South Wales Railway Quay to the yards on the opposite side, lying to the north of the Salt Warehouses, or *vice versa*, not having previously paid canal dues, shall pay a rate of 2d. per ton.

Wharfage.—Goods remaining upon the wharfs (except the wharf specified in the foregoing regulation), for above *forty-eight hours*, *twopence* per ton. And all goods remaining upon any of the wharfs, excepting the north wharf, shall be further charged wharfage at the

Gloucester and Berkeley Canal, continued.

rate of *twopence* per ton per week, and at that rate for any part of a week they may so remain after the expiration of the forty-eight hours. And all goods remaining upon the "*North Wharf*," shall be further charged wharfage at the rate of *one shilling* per ton per week, and at that rate for any part of a week they may so remain, after the expiration of the forty-eight hours.

All goods deposited upon the wharf underneath the "*Pillar Warehouse*," upon the west side of the basin, and remaining there longer than twenty-four hours, shall be charged 1d. per ton per day.

Goods, carriages of every description, and all other things, shall only be placed on the wharfs, roads, and premises of the Canal Company in such manner, and on such parts thereof as the officers of the Company may direct; and if any goods, carriages, or other things shall be placed contrary to their directions, the officers of the Company may remove the same; and wharfage at the rate of 6d. per ton per hour shall be charged, after notice shall have been given to remove the same.

Floatage of Timber.—For timber discharged from vessels into the canal, on the south side of "*Siller's Bridge*," and remaining afloat on the south side of such bridge, after the expiration of thirty days, a floatage rate of one halfpenny per stick per week shall be paid, and in like proportion for any part of a week; and if such timber should be removed to any part of the canal, on the north side of such bridge, a floatage rate of 1d. per stick for the first week after such removal, and 2d. per stick per week afterwards, and in like proportion for any part of a week, shall be paid.

For timber discharged from vessels into the canal, on the north side of "*Siller's Bridge*," and remaining afloat on the north side of such bridge, after the expiration of fifteen days, a floating rate of 1d. per stick per week shall be paid, and in like proportion for any part of a week; and should it remain afloat on the north side of such bridge longer than twenty-eight days, after the fifteen days, 2d. per stick per week, and in like proportion for any part of a week, shall be paid.

All timber sold and delivered from one merchant to another, and put into the canal from the yards, and floating in the canal or basins two weeks following, shall pay 2d. per stick per week, and in like proportion for the whole time it may remain afloat. And all timber imported in trows or barges discharged into the canal, shall be subject to the same regulation and charge.

No timber shall be permitted to remain afloat, so as to endanger the navigation of any vessel along the canal, or interrupt or render inconvenient the navigation of the Canal.

*Gloucester and Berkeley Canal, continued.***Cranage.**

			£	s.	d.	
For each lift under 2 tons	..	0	0	3	per ton.	
2 tons and under 5	..	0	0	6	"	
5	..	0	10	0	for each lift.	
6	..	0	12	0	"	
7	..	0	16	0	"	
8	..	1	2	0	"	
9	..	1	10	0	"	
10 tons	..	2	0	0	"	

All lifts exceeding 10 tons can only be made by special agreement with the Company, and at rates not less than 10s. for every ton above the preceding.

			£	s.	d.	
10 tons and under 11 tons	..	2	0	0	for each life.	
11	..	2	10	0	"	
12	..	3	0	0	"	
13	..	3	10	0	"	
14	..	4	0	0	"	

Lockage.—Every vessel passing through the Company's locks empty or in ballast, shall pay 1d. per ton on the register tonnage for each lock of water; and every vessel bringing into, or conveying along the canal, a less quantity of goods than her register tonnage, shall pay a 1d. per ton per lock on the difference between the tonnage of the goods on board and the register tonnage of the vessel—provided that the hold of the vessel is not full.

In all cases of removal of goods, wares, and merchandize, from the Company's wharfs or docks, through the locks, upon which the above rates of tonnage have been paid, such further payment only shall be made as will amount to 1d. per ton on the register tonnage of the vessel departing with such goods.

Moorage.—All vessels remaining in the Canal or basins longer than one calendar month, shall be charged upon the register tonnage, the following rates, viz.:—One halfpenny per ton per week, if such vessels shall be moored, or remain on the north side of Hempstead Bridge, and one farthing per ton per week, if moored, or remaining in any part of the canal below Hempstead Bridge.

Lockage and Moorage.—Boats and vessels under twenty tons burthen shall be rated as twenty tons.

Weighing Machine Rates.—For coal, manure, stone, and gravel, 2d. per ton; all other goods, 3d. per ton.

Tracking.—The following scale of charges shall be paid by the masters of vessels for tracking, viz.:—

For the whole length of the Canal,

For vessels under 26 tons	8s. 6d. each way.
„ above 26 and not exceeding 150 tons	4d. per ton.
„ above 150 { for 150 tons.....	4d. „
{ for the remainder	2½d. „

One half of the above rates shall be paid to and from the Junction, and $\frac{1}{4}$ d. per ton per mile for all intermediate distances.

	s.	d.	
If put on board at the Ballast Banks.....	0	8	per ton.
If brought in carts, or alongside afloat, either at Gloucester, or within two miles thereof.....	1	0	„
If thus taken in carts or afloat at any other part of the Canal.	1	2	„
If in the tidal Basin at Sharpness	1	6	„

All ballast not supplied by the ballast contractor will be charged tonnage at the rate of 6d. per ton.

The Canal Pilots are authorized to demand and take the following charges for Piloting Vessels up or down the Canal.

Vessels under 75 tons register..... 5s. 0d up or down.

Vessels 75 and under 100 tons register .. 7s. 6d.

Register Tonnage.	Draft of Water.			Charge.		Register Tonnage.	Draft of Water.			Charge.	
	ft.	in.		s.	d.		ft.	in.		s.	d.
100 ..	11	0	..	10	0	375 ..	13	9	..	21	0
125 ..	11	3	..	11	0	400 ..	14	0	..	22	0
150 ..	11	6	..	12	0	425 ..	14	3	..	23	0
175 ..	11	9	..	13	0	450 ..	14	6	..	24	0
200 ..	12	0	..	14	0	475 ..	14	9	..	25	0
225 ..	12	3	..	15	0	500 ..	15	0	..	26	0
250 ..	12	6	..	16	0	525 ..	15	3	..	27	0
275 ..	12	9	..	17	0	550 ..	15	6	..	28	0
300 ..	13	0	..	18	0	575 ..	15	9	..	29	0
325 ..	13	3	..	19	0	600 ..	16	0	..	30	0
350 ..	13	6	..	20	0						

And 6d. additional for every three inches draft of water above.

Channel and River Pilotage.

LIMBS.—The Bristol Channel eastward of Lundy Island, including the River Severn to the City of Gloucester and the River Wye to Chepstow Bridge.

Every licensed pilot employed in piloting vessels to or from the port of Gloucester shall be paid the following Pilotage rates, according to the register tonnage of the vessel.

Gloucester and Berkeley Canal, continued.

		To or from Lundy and			Holmes or			Kingroad			Sharpness		
		Cardiff Roads			£ s. d.			£ s. d.			£ s. d.		
Under 100 tons	.....	1	10	0				2	0	0	4	0	0
100 tons and under 200		2	0	0				2	10	0	5	0	0
200	"	300	2	7	6			3	0	0	6	0	0
300	"	400	2	15	0			3	10	0	7	0	0
400	"	500	3	5	0			4	2	6	8	5	0
500	"	600	3	15	0			4	15	0	9	10	0
600	"	800	4	5	0			5	7	6	10	15	0
800	"	1000	5	0	0			6	5	0	12	10	0
1000 tons and upwards..		5	15	0				7	5	0	14	10	0

		To or from Nash Point or Minehead and			Holmes or			Kingroad			Sharpness		
		Cardiff Roads			£ s. d.			£ s. d.			£ s. d.		
Under 100 tons	.....	1	0	0				1	10	0	3	10	0
100 tons and under 200		1	5	0				1	15	0	4	5	0
200	"	300	1	10	0			2	2	6	5	2	6
300	"	400	1	15	0			2	10	0	6	0	0
400	"	500	2	2	6			3	0	0	7	2	6
500	"	600	2	10	0			3	10	0	8	5	0
600	"	800	2	17	6			4	0	0	9	7	6
800	"	1000	3	7	6			4	12	6	10	17	6
1000 tons and upwards..		3	17	6				5	7	6	12	12	6

		To or from Holmes or Cardiff Roads and			Kingroad			Sharpness		
		£ s. d.			£ s. d.			£ s. d.		
Under 100 tons	.....	0	10	0				2	10	0
100 tons and under 200	....	0	12	6				3	2	6
200	"	300	0	15	0			3	15	0
300	"	400	0	17	6			4	7	6
400	"	500	1	2	6			5	5	0
500	"	600	1	7	6			6	2	6
600	"	800	1	12	6			7	0	0
800	"	1000	1	17	6			8	2	6
1000 tons and upwards	.....	2	2	6				9	7	6

To or from Kingroad or Sharpness—

	£	s.	d.		£	s.	d.
Under 40 tons	0	15	0	300 tons and under 400	3	10	0
40 tons and under 60	1	1	0	400 " 500	4	2	0
60 "	80	1	11	500 " 600	4	15	0
80 "	100	2	0	600 " 800	5	7	6
100 "	200	2	10	800 " 1000	6	5	0
200 "	300	3	0	1000 tons and upwards	7	5	0

Gloucester and Berkeley Canal, continued.

Pilots taken on board any vessel inward bound to the westward of Ilfracombe, shall be paid the same Pilotage rates as from Lundy Island; if between the Nash Point and Ilfracombe, the same rates as from the Nash Point; if between the Nash Point and the Holmes, the same rates as from the Nash Point; and if between the Holmes and Kingroad, the same rates as from the Holmes.

Pilots, discharged from any vessel on the outward voyage between any of the stages mentioned in the above scale of rates, shall be paid the same Pilotage rates as if they had been taken to the next stage beyond the place where they were discharged.

All vessels piloted to Chepstow or to Lydney shall pay the same Pilotage rates as to Sharpness, and vice versa, with the exception of Coal laden vessels coastwise to and from Lydney, under 200 tons register, for which a special scale of charges, at a reduced rate, is provided by the 4th Pilotage Bye Law.

Vessels piloted from Sharpness to Lydney, or from Lydney to Sharpness, and then to Kingroad, shall pay the same rates as between Sharpness and Kingroad.

Vessels piloted to and from any place in the River Severn above Sharpness shall pay one-fourth more than the rates between Sharpness and Kingroad.

All light vessels between Kingroad and Sharpness, or any intermediate point, shall be entitled to one-fifth reduction on the full pilotage charges for that portion of the district; and all vessels propelled or towed wholly by steam power, between Kingroad and Sharpness, or any intermediate point, shall be entitled to a further reduction of one-fourth of the full pilotage charges for that portion of the district.

Vessels taking a Pilot from Kingroad to any place on the River Severn must employ assistants to the Pilot, whose number and payment are regulated by the 6th Pilotage Bye Law.

Vessels retaining a Pilot on board after he has discharged the duties for which he was engaged, or whilst waiting for water up the River Severn, or whilst delayed by contrary winds when outward bound, and vessels in charge of a Pilot compelled to bear up and return from the westward from stress of weather or accident, must compensate him according to the regulations contained in the 7th, 8th, and 9th Pilotage Bye Laws.

In addition to the foregoing charges, a Collector's Fee, varying according to the size of the vessel, from 6d. to 2s. 6d. is payable under the 10th Pilotage Bye Law.

HAVERFORDWEST.

Keelage and Wharfage.—One penny per ton registered tonnage.

ILFRACOME.**Keelage.**

For every ship or vessel driven in by stress of weather, &c.

Coasters belonging to the port 0s. 6d.

„ not belonging to the port 1s. 6d.

Vessels going to or coming from any of Her Majesty's Plantations in Asia, Africa, or America, 2s. 6d.

Also, for every vessel paying Keelage, the additional sum of 6d. for each Top borne by such vessel.

Lighthouse.

For every vessel belonging to the port 0s. 6d.

For every vessel not belonging to the port .. 1s. 0d.

The Light is kept up from the first day of September to the last day of March in every year.

Mooring Chains and Buoys.

Smacks, 1s.

Two-mast vessels, 2s.

Harbour Dues.

Coasting Smacks, 3s. 6d. Schooners, 4s. 6d. Brigs, 5s. 6d.

Foreign going, 1s. extra.

When the light is out, 6d. each less for vessels belonging to the Harbour, and 1s. each less for vessels not belonging to the Harbour.

LLANELLY.**Pilotage.**

LIMIT No. 1.—If a Pilot be taken on board as far to the Westward as to bring Rhossilly Church open to the westward of the Holmes, he is to be paid for every foot of water the vessel may draw.

LIMIT No. 2.—If taken on board within No. 1. but to the westward of No. 4 buoy for Pembrey, or No. 6 for Llanelly.

	Limit No. 1.		Limit No. 2.		Outwards.	
	s.	d.	s.	d.	s.	d.
Under 50 tons register ..	1	6	..	0 9	..	0 9
From 50 to 75 „ ..	1	9	..	1 0	..	1 0
75 to 100 „ ..	2	0	..	1 3	..	1 3
100 to 125 „ ..	2	3	..	1 6	..	1 6
125 to 150 „ ..	2	6	..	1 9	..	1 9
150 to 175 „ ..	2	9	..	2 0	..	2 0
175 to 200 „ ..	3	0	..	2 3	..	2 3
200 to 225 „ ..	3	3	..	2 6	..	2 6

and 3d. per foot for every additional 25 tons register.

Pilots taken on board inside buoy No. 6, when bound for Llanelly, or inside No. 4, when bound for Pembrey, to be paid 2s. 6d. each for a hobble.

Llanelly, continued.

If any vessel shall evade being boarded by a Pilot in Limit No. 1. she shall pay for Limit No. 1, although boarded above that limit, beside the penalty for refusing a Pilot.

Every vessel paying 2s. per foot and upwards, shall be taken by the Pilot clear of the Holmes, if required.

Each vessel to pay 1s. for the boat.

That when any vessel not exceeding 125 tons register shall have the assistance of a steam-tug in taking her out to sea, a reduction of ten per cent. shall be made on her outward Pilotage.

That all vessels proceeding above Llanelly shall pay as follows, in addition to the rates inwards and outwards from Llanelly :—

	To or from Penclawdd			To or from Spitty			Penclawdd to Spitty	
	s.	d.		s.	d.		s.	d.
Under 50 tons register..	2	6	..	4	0	..	2	6
From 50 to 100 „	3	6	..	6	0	..	3	6
100 to 150 „	4	6	..	8	0	..	4	6
150 to 200 „	6	0	..	9	6	..	6	0

and 6d. for every additional 25 tons register.

Harbour Pilotage.

Under 50 tons, 2s.; 50 and under 75, 2s. 6d.; 75 and under 100, 3s.

For removing vessels between

	Llanelly and Pembrey			Pembrey and Burry Port.	
	s.	d.		s.	d.
Under 50 tons register	3	6	..	3	6
75 „	4	6	..	4	0
100 „	5	6	..	4	6

For every additional 25 tons—Llanelly and Pembrey, 1s.: Pembrey and Burry Port, 6d.

Vessels sailing from the port, and putting back after having discharged their Pilots, to pay half Pilotage in and out.

Three shillings and sixpence to be the rate charged for a Bar hobble

“Ceres” Pilot Ship.

That a charge of 2s. 6d. per 100 tons register be made upon every vessel taking a Pilot boarded from the “Ceres.”

Ballast Rates.

Every vessel shall pay for every ton discharged, 4½d.

For each man otherwise employed, ½d. per ton.

Buoyage Dues.

For every ship or other vessel entering into the Rivers Burry, Loughor, and Lliedi, or either of them, from and over the Bar of Burry, 1d. per ton register.

*Llanelly, continued.***Dock Dues.**

Llanelly or New Dock..... 2d. per ton register.
 Copper Works' Dock 1d ,,
 Carmarthenshire Dock, 1d. per ton register, for vessels entering
 using the Dock, and 1d. per ton the first week, and a farthing
 ton every week after, if for repairs or lying up.

LYDNEY.**Tonnage Rates.**

	s.	d.		s.
1 to 10 tons burthen ..	1	0	45 to 50 tons burthen..	4
11 to 20 ,, ..	2	0	51 to 80 ,, ..	5
21 to 30 ,, ..	3	0	81 to 100 ,, ..	6
31 to 44 ,, ..	4	0	101 tons and upwards....	7

Pilotage.—The same as Gloucester.

MILFORD.**DEFINITION OF LIMITS.**

From Caldy Island along the coast to St David's Head, and from thence
 Cardigan Island, and *vice versa*; and to and from, and into and out of all ports
 and places within these Limits.

Pilotage Rates.

	Under 14 ft. per foot. £ s. d.	14 ft. & U per foot £ s.
From a line drawn from St. Ann's Point to Sheep's Island, to any part of the Harbour below a line drawn from Newton Noyse Point to Martin's Haven.....	0 2 6	0 3
From a line drawn from St. Ann's Point to Sheep's Island, or from Habberstone Road to any place above a line drawn from New- ton Noyse Point to Martin's Haven in addition	0 2 0	0 2

Vessels inward-bound not boarded until they have passed a line
 drawn from Rat Island to Watwick Point, are to pay one-fourth less
 than the foregoing rates, and if not boarded until they have passed a
 line drawn from Thorne Island to Great Castle Head, they are to pay
 one-half only of the said rates, and if not boarded until they have
 passed the Stack Rock, to a line from Newton Noyse Point to
 Martin's Haven, they are not to be chargeable with any Pilotage
 unless the masters thereof require Pilotage assistance.

*Milford, continued.***Additional Rates.***For Ships boarded without the entrance of the Harbour.*

	£	s.	d.
From a line drawn from Leuny Point to Skokham Island			
in addition, per foot	0	2	0
If to the southward of St. Gowan's Head, ditto	0	1	0
Or from Caldy Island eastward, or from the westward of the Grassholm, or three leagues without Leuny Point, in addition to the Harbour Pilotage	3	3	0
Six leagues, ditto	4	4	0
Ten leagues, ditto	6	6	0

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first-mentioned ships shall by an order of Her Majesty's most Honourable Privy Council, be privileged to enter the ports of this Kingdom upon paying the same duties of tonnage as are paid by British ships, in which case such ships and vessels not having British registers shall pay the like rates of Pilotage only as are payable by ships having British registers. The said surplus rate chargeable on unprivileged Foreign vessels is to be paid to the Collector of this Corporation's Light Duties, at the Custom House, Milford.

Port Charges.

	£	s.	d.
Keelage	0	0	4
Making fast to the rings	0	0	6
Quayage and moorage per ton register	0	0	0½
Foreign vessels, loading or discharging, per ton	0	0	6
Coasting vessels, loading or discharging, per ton	0	0	2
Loading ballast, per ton	0	0	2
Deposit for landing ballast on quay	1	0	0
Ballast lying on the quay, per ton	0	0	0½
Use of beach discharging	0	1	0
Use of beach outfitting or repairing, per ton register	0	0	1
Vessels lying alongside the quay for any period not exceeding one month, per ton register	0	0	2
And for every succeeding month	0	10	0

NEATH.**Tonnage Rates.**

For every ship or vessel which shall anchor, load, or unload within the said port, or which shall be made fast to any pier or other work within the same, or any part thereof, the sum of 1½d. per ton of the register tonnage of such ship or vessel.

*Neath, continued.***Rates of Pilotage.**

LIMIT.—From the outside of Neath Bar into the Port and Harbour of Neath, and *vice versa*.

FIRST STATION.—From outside of Neath Bar to the Layer, and to any distance between the Layer and the southern end of Abbey Estate, and *vice versa*.

Vessels under 40 tons register, 7s.; over 40 and under 60, 10s. with or without Steam.

SECOND STATION.—From outside of Neath Bar to any distance lying between the inner termination of the First Station and the Abbey Pill, and *vice versa*.

Vessels under 40 tons register, 8s.; over 40 and under 60, 11s. with or without Steam.

THIRD STATION.—From outside of Neath Bar to any distance lying between the Abbey Pill and Neath Bridge, and *vice versa*.

Vessels under 40 tons register, 9s. 6d.; over 40 and under 60, 13s. 6d. with or without Steam.

For vessels over 60 tons register, the rates are as follows:—

Draught of Water.	1st Station.			2nd Station.			3rd Station.		
	Without Steam.	With Steam.		Without Steam.	With Steam.		Without Steam.	With Steam.	
	£ s. d.	£ s. d.		£ s. d.	£ s. d.		£ s. d.	£ s. d.	
8 feet ..	0 11 3	0 8 5		0 12 9	0 9 7		0 14 9	0 11 1	
8½ " ..	0 12 0	0 9 0		0 13 6	0 10 2		0 16 0	0 12 0	
9 " ..	0 12 6	0 9 5		0 14 0	0 10 6		0 16 6	0 12 5	
9½ " ..	0 13 0	0 9 9		0 14 6	0 10 11		0 17 0	0 12 9	
10 " ..	0 13 6	0 10 2		0 15 0	0 11 3		0 18 0	0 13 6	
10½ " ..	0 14 0	0 10 6		0 16 0	0 12 0		0 19 0	0 14 3	
11 " ..	0 14 6	0 10 11		0 16 9	0 12 7		1 0 0	0 15 0	
11½ " ..	0 15 9	0 11 10		0 18 3	0 13 8		1 1 6	0 16 2	
12 " ..	0 16 10	0 12 8		0 19 10	0 14 11		1 3 1	0 17 4	
12½ " ..	0 18 6	0 14 2		1 2 0	0 16 6		1 5 3	0 18 11	
13 " ..	1 0 6	0 15 5		1 4 6	0 18 5		1 8 0	1 1 1	
13½ " ..	1 2 6	0 16 11		1 7 0	1 0 3		1 10 6	1 2 11	
14 " ..	1 8 0	1 1 0		1 13 0	1 4 9		1 17 0	1 7 9	
14½ " ..	1 13 6	1 5 2		1 19 6	1 9 8		2 4 6	1 13 5	
15 " ..	2 1 6	1 11 2		2 8 6	1 16 5		2 14 6	2 0 11	
15½ " ..	2 10 6	1 18 0		2 17 9	2 3 4		3 5 3	2 8 11	
16 " ..	3 1 0	2 5 9		3 8 6	2 11 5		3 17 0	2 17 9	
16½ " ..	3 12 0	2 14 0		4 0 6	3 0 5		4 10 6	3 7 11	
17 " ..	4 5 6	3 4 2		4 14 0	3 10 6		5 6 0	3 19 6	
17½ " ..	4 19 0	3 14 3		5 8 0	4 1 0		6 2 0	4 11 6	
18 " ..	5 13 0	4 5 0		6 3 0	4 12 3		6 19 0	5 4 3	

And 10s. for every half foot over 18 feet.

And 7s. extra for every half foot over 18 feet.

And 8s. extra for every half foot over 18 feet.

For conducting vessels from one station to another station within the Port:—

	s.	d.
Vessels under 100 tons	3	0
" over 100 tons and under 150..	4	0
" " 150 " " 200..	5	0
" " 250 " " ..	8	0

Neath, continued.

To or from the Mumbles:— s. d.

Vessels under 250 tons 4 0 extra

" over 250 " 7 0 "

Pilot Boats and Hobblers' Fees, 5s., which is included in the rates.

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first mentioned ships shall, by any order of Her Majesty's most Honourable Privy Council, be privileged to enter the ports of this kingdom, upon paying the same duties of tonnage as are paid by British ships, in which case such ships and vessels not having British registers shall pay the like rates of Pilotage only as are payable by ships having British registers.

Pilot leading the way (if required by the master of the vessel following), entitled to half-pilotage as far as he shall lead.

Rates to Hobblers.

	s.	d.
Hobbler over the Bar, to or from the Llayer or Giant's Grave, or the southern end of the Abbey Estate	2	6 per vessel
Hobbler over the Bar, to or from Fox's Coal Bank, or the Copper Works, or the Abbey Pill	3	0 "
Hobbler over the Bar, to or from Melincrythan Wharf or Neath Bridge	4	0 "
Hobbler employed in removing or assisting vessels within the Harbour.. ..	1	6 per tide

Towage Rates and Regulations.**INWARDS.**Per ton register.
s. d.

From the Outer Buoy to Llayer or Giant's Grave..	..	0	1½
" " Abbey Coal or Crown Copper Works	0	1½	
" " Mines Royal Copper Works	..	0	2
" " Neath .. ..	..	0	2½

OUTWARDS.

From Giant's Grave or the Llayer to Sea or Outward Buoy	0	2	
" Abbey Coal or Crown Copper Works to Sea or Outward Buoy .. ..	..	0	2½
" Abbey Pill or Mines Royal Copper Works to Sea or Outward Buoy.. ..	..	0	2½
" Neath to Sea or Outward Buoy .. ..	..	0	2½

Vessels that may require to be towed shorter distances, if not having been offered the steamer to tow them the whole distance from where they were laden or going to load, to pay as under:—

From the Llayer to Giant's Grave, and vice versa	..	0	0½
" Abbey Coal or Crown Copper Works	..	0	1
" Abbey Pill or Mines Royal Copper Works	0	1½	
" Neath .. ..	..	0	1½

Newport, continued.

s. d.

For every ship or other vessel which shall have departed from the said dock with a cargo, or any part of such cargo laden therein, and shall re-enter the said dock, with the same cargo, or part of such cargo, per ton measurement, (exclusive of the dues under the name of rent hereinafter mentioned)	0	3
OUTWARDS.—For every ship or other vessel which shall depart from the said dock to any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney, and Sark, per ton measurement.. ..	0	2
To any other part of Europe, except places within the Straits of Gibraltar and round the North Cape, per ton measurement	0	5
To any port or place in Europe, round the North Cape, or any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa, per ton measurement	0	7
To any port or place in British America, any port or place in the United States of America, or any port or place in any other part of the world, per ton measurement	0	10
For every ship or other vessel which shall enter the said dock in ballast, or light, and depart therefrom in ballast, or light, per ton measurement (exclusive of the dues under the name of rent hereinafter mentioned)	0	3

Police and Watchmen.

For all vessels entering or departing from the dock, at per week, or fractional part of a week	1	0
N.B.—Competent watchmen for the protection of vessels and property therein can be obtained on application at the dock-office, the charge for each watchman is per night	3	6

Rent Charges.

All ships and vessels entering the dock in ballast and departing with cargoes not exceeding 400 tons register measurement, to be allowed to remain at the rates before specified for a period of	2	weeks
Above 400 tons and not exceeding 700 tons register measurement	3	„
Above 700 tons register measurement	4	„
Vessels above 70 tons and not exceeding 700 tons register measurement entering with a cargo and going out with another	4	„
Vessels above 700 tons register measurement entering with a cargo and going out with another	5	„
Vessels above 70 tons register measurement entering with a cargo and going out without breaking bulk, or which shall discharge, and afterwards take on board and depart with the same cargo	3	„

Newport, continued.

Vessels under 70 tons register measurement, entering the dock without ballast 4 days
s. d.

All ships and vessels which shall remain in the dock for any longer periods than those respectively above stated, shall be subject (in addition to the rates and dues before stated) to a rent charge of, for the first week, or any portion of a week, per ton register measurement 0 0½

For the second week or any portion of a week, per ton register measurement 0 1

For the third week or any portion of a week, per ton register measurement 0 1½

For the fourth week and every subsequent week and for any portion of a week, per ton register measurement 0 2

N.B.—In estimating the dues contained in the foregoing schedule, every vessel of less than 20 tons register measurement shall be rated at 20 tons register measurement.

Use of Machinery for Shipping or Unshipping.

For every ton of coal 0 1½

For every ton of coke, culm, iron, cinders, iron ore, earth or rubbish of any kind 0 2½

For every ton of metallic (not iron) ore 0 3

Whenever waggons containing any of the above articles are moved on the railway sidings by hydraulic power in connection with the shipping machines, a charge will be made at the rate per ton of 0 1

All articles, matters or things not included in the above-mentioned, and excepting ballast, will be subject to special agreement and charges.

Persons (other than the crews of vessels on the dock), landing or embarking on the Dock Company's premises, will be subject to a charge per head of 0 1

Charges for Discharging and removing Ballast.

For every ton of ballast that is in the hold within 15 feet abaft, and 15 feet before any hatchway 1 0

For every ton of ballast exceeding in the hold a greater distance than stated above, an additional sum of 0 2

An additional charge for working by night will be made at the rate of per ton 0 3

Rates of Pilotage.

The Limit of this Pilotage is that portion of the Bristol Channel which lies eastward of Lundy Island, up to, and includes Kingroad and the River Usk as far as the Caerleon Bridge. This Pilotage is not compulsory, but may be obtained over all or any portion of this district, at the discretion of the masters of vessels.

Newport, continued.

Every licensed Pilot employed in piloting vessels to or from the port of Newport shall be paid the following Pilotage Rates, according to the registered tonnage of the vessel.

FOR LADEN VESSELS.

			Newport to Mouth of River Usk.			Newport to the Holmes or Cardiff Roads.		
			£	s.	d.	£	s.	d.
If under 100 tons.....			0	10	0	..	0	13 0
100 tons and under 200			0	15	0	..	1	0 0
200	300	....	0	17	6	..	1	10 0
300	400	....	1	2	6	..	1	15 0
400	500	....	1	5	0	..	2	1 0
500	600	....	1	6	0	..	2	3 0
600	800	....	1	8	0	..	2	8 0
800	1000	....	1	10	0	..	2	12 0
1000 tons and upwards.....			1	12	0	..	2	16 0

For all vessels actually engaged in the coasting trade of the United Kingdom, and vessels in ballast, the charges to be one-third less than the above.

FOR LADEN AND UNLADEN VESSELS.

			Limit No. 1.			Limit No. 2.			Limit No. 3.		
			£	s.	d.	£	s.	d.	£	s.	d.
If under 100 tons			0	7	6	0	17	6	1	5	0
100 tons and under 200			0	10	0	1	5	0	1	12	6
200	300		0	15	0	1	15	0	2	10	0
300	400		0	17	6	1	17	6	2	17	6
400	500		1	0	0	2	2	6	3	5	0
500	600		1	2	6	2	7	6	3	15	0
600	800		1	5	0	2	15	0	4	5	0
800	1000		1	10	0	3	5	0	5	5	0
1000 tons and upwards			1	15	0	3	15	0	6	0	0

LIMIT No. 1.—Between the Holmes or Cardiff Roads and Minehead or Kingroad, or any point east of Minehead and west of Kingroad.

LIMIT No. 2.—Between the Holmes or Cardiff Roads and Coombe, or any Point west of Minehead or Nash Point, and east of Coombe.

LIMIT No. 3.—Between the Holmes or Cardiff Roads and Lundy Island, or any point west of Coombe.

Any Pilot who may be required to remain on board any ship or vessel for the convenience of the captain, owner, or agent, after he shall have discharged the duties for which he was engaged, shall be entitled to be paid ten shillings per day for every day he may be employed; and any Pilot who may be required to move any ship or vessel in the dock, harbour, or river, occupying only one tide, shall be entitled to be paid for every ship.

Newport, continued.

	s.	d.
Under 100 tons	4	0
100 and under 300	5	0
300 „ 500	7	6
500 „ 800	10	0
800 and upwards	12	6

Vessels wind-bound in the waters of the Newport District, and retaining the services of a Pilot, shall pay five shillings per diem.

Pilots taken on board of any vessel inward bound to the westward of Ilfracombe, shall be paid the same Pilotage rates as from Lundy Island; but if west of Nash Point or Minehead and east of Ilfracombe the same rates as from the Nash Point; if between the Nash Point and the Holmes, the same rates as from the Nash Point; and if between the Holmes and Kingroad, the same rates as from the Holmes.

In case any vessel shall be compelled to bear up and return from the westward from stress of weather or accident, the Pilot in charge shall be entitled to, and shall be paid one-third of the Pilotage charge in addition, according to the distance such ship or vessel may have reached before she shall have put back.

Every master, owner, or agent of any vessel employing a Pilot, shall, in addition to the foregoing charges, pay a clerk or collector's fee, as follows, viz.:—

	s.	d.
Vessels under 100 tons	0	6
100 and under 300	1	0
300 „ 500	1	6
500 „ 800	2	0
800 and upwards	2	6

PEMBREY.**Ballast Rates.**

Wheeling, 1d. per ton register.

Every man employed on board to be paid at the rate of three shillings per day.

Each vessel to pay extra for the use of the planks, barrows, and waggons, viz.:—

	s.	d.
Not exceeding 50 tons register	1	0
„ 100 „	1	6
„ 150 „	2	0
„ 200 „	2	6
„ 300 „	3	0
„ 350 „	3	6
„ 400 „	4	0
Exceeding 400 „	4	6

The same charge extra for the use of the crane and tubs if required.

PORTHCAWL.

The Charges are subject to modification on completion of the Floating Dock and other improvements in progress at this Harbour.

Depth of Water—Neaps 16ft., Springs 26ft.

Porthcawl, continued.

And for the use of the Pilot Boat, every ship using the same:—

	s.	d.
Per registry under 75 tons	1	0
75 tons and upwards	2	0

For transporting a ship in the harbour, and re-mooring her, or for mooring or unmooring a ship, 1s 6d. for each Pilot, and 9d. for each hobbler.

And if any master of a ship shall engage a Pilot and hands to take his ship out of the harbour, and she is not ready to be taken out during that tide, or if after having been moved for the purpose of being taken out she does not proceed, 1s. 6d. for each Pilot, and 9d. for each hobbler or assistant.

PORT TALBOT.**Tonnage Rates.**

For every vessel laden..... 3d. per ton register.

For every vessel in ballast .. 2d.

Pilotage.

		From Outer Buoy To Outer Buoy to destination, if from berths, if in 1 tide of 3 hrs. in 1 tide of 3 hrs.								
		£	s.	d.	£	s.	d.			
Above 25 tons register and under	40	..	0	5	0	..	0	4	0	
40	„	50	..	0	6	0	..	0	5	0
50	„	60	..	0	7	0	..	0	6	0
60	„	70	..	0	8	0	..	0	6	10
70	„	80	..	0	9	0	..	0	7	8
80	„	90	..	0	10	0	..	0	8	6
90	„	100	..	0	12	0	..	0	9	10
100	„	120	..	0	14	0	..	0	11	6
120	„	140	..	0	16	0	..	0	13	2
140	„	160	..	0	18	0	..	0	14	10
160	„	180	..	1	0	0	..	0	16	6
180	„	200	..	1	5	0	..	1	0	0
200	„	250	..	1	10	0	..	1	3	6
250	„	300	..	2	0	0	..	1	10	4
300	„	350	..	2	15	0	..	2	0	8
350	„	400	..	3	10	0	..	2	11	4
and for every additional 50 tons		....	0	5	0	..	0	4	0	

If inside the outer buoy only one-half of the foregoing rates.

For transporting a vessel from one part of the harbour to another—
under 100 tons, 2s. 6d.; above 100 tons, 5s.

The price paid to hobbler not to exceed 2s. for each hobble: and no hobbler shall charge two hobbles, unless occupied for more than three successive hours.

Port Talbot, continued.

For every hobbler engaged by the master, 1s 6d. from sea into the dock, and 2s. from sea to the wharf of her destination; if required to tow, 6d. additional to each hobbler; if engaged only to the end of the breakwater, half the above rates only to be charged.

Steam Tugs.

To or from the outer Buoy.

Register Tonnage.	£	s.	d.	Register Tonnage.	£	s.	d.
tons and under ..	0	3	0	100 and under 120 ..	0	17	0
and under 30 ..	0	4	0	120 ..	1	1	0
„ 40 ..	0	5	0	150 ..	1	5	0
„ 50 ..	0	6	0	200 ..	2	5	0
„ 60 ..	0	8	0	250 ..	2	10	0
„ 70 ..	0	9	0	300 ..	2	10	0
„ 80 ..	0	10	6	400 ..	3	10	0
„ 90 ..	0	13	0	500 ..	4	10	0
„ 100 ..	0	15	0	every additional 50 tons	0	5	0

Stemming Fee, 1s.

For use of Harbour Company's tow rope:—

	s.	d.
Vessels under 50 tons register burthen	1	0
„ of 50 tons and under 100	3	0
„ 100 „ 200	3	0
„ 200 „ 300	4	0
„ 300 tons and upwards	5	0

Ballast.

Ballast in the river is free of charge; in the dock 3d. per ton.

For use of planks and barrows for 10 tons and under, 2s.; 10 tons and under 20, 3s. 6d.; and 1s. extra for every 10 tons additional.

For use of the graving bank:—on the hard, 1d. per ton register per week; on the blocks, 1½d. per ton register per week.

SAUNDERSFOOT.

Pilotage.—For every 100 tons in and out, 10s.

Harbour Dues.—2d. per ton register.

Pier Light and Signal.

Each Vessel.	s.	d.	Each Vessel.	s.	d.
20 to 30 tons register	0	3	70 to 100 tons register ..	1	0
30 to 50 „	0	6	100 to 150 „ ..	1	6
50 to 70 „	0	9	150 tons and upwards ..	2	0

Discharging Ballast.

For each man employed on board.... 1d. per ton register.

For wheeling 1d. „

Trimming.—2d. per ton.

SWANSEA.**Tonnage Rates.**

For every vessel bound from and to any port or place in the United Kingdom, or the Isle of Man, under 150 tons.....	per ton	s.	d.
150 tons and under 250 tons	per ton	0	4
250 tons and under 350 tons	per ton	0	5½
350 tons and upwards.....	per ton	0	7
		0	8½

For every vessel bound to or from any port or place in Europe, or any port or place within the

Straits of Gibraltar, under 100 tons	per ton	0	4
100 tons and under 250 tons	per ton	0	6
250 tons and under 350 tons	per ton	0	7½
350 tons and upwards.....	per ton	0	9

For every vessel bound to or from any other port or place than above specified, under 150 tons

150 tons and under 250 tons	per ton	0	7½
250 tons and under 350 tons	per ton	0	9½
350 tons and upwards.....	per ton	1	0
		1	3

And in respect of Vessels entering in Ballast, and departing with Cargoes, the following Rates.

Vessels bound to ports in the United Kingdom, or the Isle of Man	per ton	s.	d.
		0	3

Vessels bound to any port in Europe, or within the Straits of Gibraltar, under 100 tons.....	per ton	0	3
100 tons and under 250 tons	per ton	0	5
250 tons and under 350 tons	per ton	0	6
350 tons and upwards	per ton	0	7

Vessels bound to any other ports, under 150 tons ..	per ton	0	6
150 tons and under 250 tons	per ton	0	7
250 tons and under 350 tons	per ton	0	9
350 tons and upwards.....	per ton	0	11

Vessels driven in by stress of weather, and remaining over four tides, half the above rates. Vessels remaining over thirty days, unless prevented by embargo or weather, 1d. per ton per week.

Craneage.

At Corporation Cranes, Public Quay.

For every lift under 1 ton	s.	d.	
Not exceeding 2 tons	0	3	per lift
2 to 5 tons	0	3	„
5 to 10 tons	0	6	„
Five tons and upwards	2	0	„

*Swansea, continued.***Ballast Rates.**

Register Tonnage.	Rates per ton on the quantity discharged.			
	s.	d.	s.	d.
Under 100 tons	0	5	at New Cut ..	0 6 in Dock
100 and under 150 tons	0	7	" ..	0 8 "
150 and under 200 tons	0	9	" ..	0 10 "
200 tons and upwards	0	11	" ..	1 0 "

Additional Charges.

	s.	d.	
Discharged from any vessel into another vessel	0	9	per ton
Discharged into Lighters	1	6	"
Loaded into any vessel	0	6	"
Loaded into any vessel and discharged therefrom	1	6	"

Charges for use of five and ten ton Cranes,*Belonging to the Harbour Trustees.*

	£	s.	d.		£	s.	d.
Under 1 ton ..	0	0	3	per lift	5 and under 6..	0	7 6
1 and under 2 ..	0	0	6	"	6 ..	0	10 0
2 ..	3	0	1	6	7 ..	0	12 6
3 ..	4	0	3	0	8 ..	0	15 0
4 ..	5	0	4	6	9 ..	1	0 0

No lift to exceed ten tons.

Towage.*In or Out, exclusive of Harbour Towages.*

	£	s.	d.		£	s.	d.
Under 50 tons	0	7	6	425 and under	450	3	15 0
50 and under	75	0	10 0	450	"	475	4 0 0
75 ..	100	0	12 6	475	"	500	4 5 0
100 ..	125	0	15 0	500	"	525	4 10 0
125 ..	150	0	17 6	525	"	550	4 15 0
150 ..	175	1	0 0	550	"	575	5 0 0
175 ..	200	1	5 0	575	"	600	5 5 0
200 ..	225	1	10 0	600	"	650	5 10 0
225 ..	250	1	15 0	650	"	700	5 15 0
250 ..	275	2	0 0	700	"	750	6 0 0
275 ..	300	2	5 0	750	"	800	6 5 0
300 ..	325	2	10 0	800	"	850	6 10 0
325 ..	350	2	15 0	850	"	900	6 15 0
350 ..	375	3	0 0	900	"	950	7 0 0
375 ..	400	3	5 0	950	"	1000	7 7 0
400 ..	425	3	10 0				

All vessels above 1000 tons, 2d. per ton, new measurement.

If more than one Tug is required, half the above rates will be charged for each additional Tug.

*Swansea, continued.***Pilotage.**

Register Tonnage			Inwards			Outwards			Total		
			£	s.	d.	£	s.	d.	£	s.	d.
Vessels	50 tons and under	75	0	10	0	0	6	0	0	16	0
Vessels	75 tons and under	100	0	11	0	0	7	0	0	18	0
Vessels	100 tons and under	125	0	12	0	0	8	0	1	0	0
Vessels	125 tons and under	150	0	14	0	0	8	0	1	2	0
Vessels	150 tons and under	175	0	17	0	0	8	0	1	5	0
Vessels	175 tons and under	200	0	19	0	0	8	0	1	7	0
Vessels	200 tons and under	250	1	6	0	0	10	0	1	16	0
Vessels	250 tons and under	300	1	12	0	0	12	0	2	4	0
Vessels	300 tons and under	350	2	3	0	0	14	6	2	17	6
Vessels	350 tons and under	400	2	10	0	0	17	0	3	7	0
Vessels	400 tons and under	450	2	17	6	1	2	0	3	19	6
Vessels	450 tons and under	500	3	5	0	1	7	0	4	12	0
Vessels	500 tons and under	550	3	10	0	1	12	0	5	2	2
Vessels	550 tons and under	600	3	15	0	1	17	0	5	12	0
Vessels	600 tons and under	650	4	0	0	2	2	0	6	2	0
Vessels	650 tons and under	700	4	5	0	2	7	0	6	12	0
Vessels	700 tons and under	750	4	10	0	2	12	0	7	2	0
Vessels	750 tons and under	800	4	15	0	2	17	0	7	12	0
Vessels	800 tons and under	850	5	0	0	3	2	0	8	2	0
Vessels	850 tons and under	900	5	5	0	3	7	0	8	12	0
Vessels	900 tons and under	950	5	10	0	3	12	0	9	2	0
Vessels	950 tons and under	1000	5	15	0	3	17	0	9	12	0

Together with an additional sum of 5s. in respect of every 50 tons above 950 tons on the Inward Pilotage; and an additional sum of 5s. in respect of every 50 tons above 950 tons on the Outward Pilotage.

Pilots will take vessels over 500 tons register, Outward Bound, clear of the Green Grounds, or to the Mumbles Roads, and the above charge includes landing the Pilot in all cases.

Vessels of 200 tons and upwards, if boarded beyond the following bearings, shall pay an additional Pilotage, as under:—

	W. of Pwllty Point, bearing N.N.E.		W. of Oxwich Point bearing N.N.E. S. of Sker Buoy, bearing E.N.E. or W.S.W.			W. of Worm's Head, bearing N.N.E.		
	s.	d.		s.	d.	£	s.	d.
200 tons and under 300..	4	0	..	5	0	..	0	6 0
300 tons and under 400..	5	6	..	7	6	..	0	10 0
400 tons and under 500..	7	6	..	10	0	..	0	15 0
500 tons and under 600..	10	0	..	12	6	..	1	0 0
600 tons and under 700..	12	6	..	15	0	..	1	5 0
700 tons and upwards ..	15	0	..	18	6	..	1	10 0

One half of the above Rates only to be paid and payable to every Pilot navigating or assisting any vessel (not entering Swansea Har-

Swansea, continued.

bour) within any part of Swansea Bay, or within the limits of the Pilotage Ground hereinafter mentioned.

N.B.—Pilotage not compulsory upon vessels under 100 tons register, when entering or leaving Swansea Harbour in ballast; but if any Pilotage be required, only a licensed Pilot to be employed and the above rates to be paid.

OPTIONAL PILOTAGE.—Masters of vessels under 500 tons register requiring Pilots to take their vessels to the Mumbles Roads, or clear of the Green Grounds, to pay, in addition to the Outward Pilotage Rates, the following additional rates, including landing:—

	s.	d.
Vessels under 100 tons	4	0
Vessels 100 tons and under 200.....	5	6
Vessels 200 tons and under 300.....	7	6
Vessels 300 tons and under 400.....	9	6
Vessels 400 tons and under 500.....	11	0

Masters of vessels requiring Pilots to take their vessels to the Eastern or Western Limits, to pay in addition to the Outward Rates, the following additional rates, including landing:—

	£	s.	d.
Vessels 300 tons and under 500	3	0	0
Vessels 500 tons and under 700	4	0	0
Vessels 700 tons and under 900	5	0	0
Vessels 900 tons and upwards.....	6	0	0

The following shall be deemed to be the limits of the Pilotage Ground of Pilots appointed and licensed by the Swansea Harbour Trustees, viz.:—"North of the line of the Nash Lights in one;" and "east of an imaginary line running north and south of a point, four miles westward of the Helwick light vessel, placed off the Helwick Shoal, near the Worm's Head, in the County of Glamorgan."

Every Pilot required to remain on board a vessel, whether inward or outward bound, to be paid by the Master of such vessel, at the rate of 4s. for every twelve hours, or broken portion of twelve hours, in which such Pilot shall not have earned pilotage or distance-money, in the same vessel.

Harbour Pilotage.

	s.	d.
Vessels under 10 tons	2	6
Vessels 100 tons and under 200	3	6
Vessels 200 tons and under 400	5	0
Vessels 400 tons and under 500	7	6
Vessels 500 tons and upwards.....	12	0

If the Master of any vessel shall require any Pilot to go on board and take his vessel out of the Harbour, transport or move her, and such vessel be not ready to be taken out or moved, half the rates last mentioned shall be paid to the Pilot.

Swansea, continued.

Masters of vessels requiring Hobblers or Boats, to assist in removing vessels within the Harbour, shall pay each Hobbler employed, 2s., and for each boat, 2s.

TENBY.**Tonnage Rates.**

Vessels discharging	3d. per ton register
Vessels wind bound	1½d. „
Yachts	2d. „ or 6d. per ton yearly
Trawlers	2d. „ or 40s. yearly.

Pilot Boats exempt.

WATCHET.

Harbour Dues.—One halfpenny per ton registered tonnage.

VALUE IN BRITISH CURRENCY OF THE MONEYS OF ALL NATIONS.

AMERICA, U.S.

	£	s.	d.
Eagle	2	1	0
Half Eagle	1	0	6
Dollar	0	4	2

AUSTRIA.

Ducat.....	0	9	4
Silver Florin.....	0	2	0
Dollar.....	0	4	0
Zwanzigr, 20 Kreutzers ...	0	0	8

BELGIUM.

Gold Leopold	0	19	10
— 10 Franc Piece	0	7	10
Silver 5 Franc.....	0	3	11
— 1 Franc.....	0	0	9½

BREMEN.

Louis d'or	0	16	0
Gold Rigsbank Dollar	0	3	4
36 Gross Piece	0	1	6

BRAZILS.

Gold Piece, 6400 Reis	1	15	9
— 4000 —	1	0	0
Silver ditto, 1200	0	4	2
— 960 —	0	4	1
— 640 —	0	2	9
— 320 —	0	1	4
— 200 —	0	0	8

DENMARK.

	£	s.	d.
Christian d'or	0	16	3
Silver Species	0	4	4
Rigsbank Daler	0	2	2
Mark	0	0	4½

EGYPT.

Gold New Sequin	0	10	4
Silver New Piastre.....	0	3	4
— Grush	0	1	2

EAST INDIES.

Gold Mohur.....	1	9	0
Sicca Rupee.....	0	1	10½

FRANCE.

Gold Napoleon	0	16	0
Silver 5-Franc Piece	0	4	0
— Franc	0	0	9½

GREECE

40-Drachmi Gold Piece ...	1	10	6
Five ditto	0	3	9
1 Drachmi, 100 Leplas	0	0	8½

GERMANY.

Gold Louis d'or	0	16	1
— Ducat	0	9	3
Silver Crown	0	4	4
Florin	0	1	8

HOLLAND.

	£	s.	d.
Gold 10-Florin Piece.....	0	16	6
— Ducat	0	9	3
Silver Florin or Guilder ...	0	1	8

HAMBURG and LUBEC.

Ducat.....	0	9	3
Dollar.....	0	4	4
Mark	0	1	2½

HANOVER, BRUNSWICK, &c.

Gold George d'or Double...	1	12	4
Ditto, Single	0	16	2
Thaler, 30 Groschen	0	2	11

MEXICO.

Gold Doubloon	3	5	0
— Half ditto	1	12	6
— Quarter ditto	0	16	3
— Sixteenth ditto.....	0	4	0
Silver Dollar	0	4	2
— Half ditto	0	2	1
— Quarter ditto	0	1	0½
— Eighth ditto	0	0	6½

NAPLES.

Gold Piece of 30 Ducats ...	5	0	0
Silver Ducat	0	3	4
— Dollar	0	4	0

NORWAY.

Spanish Dollar	0	4	4
Rigsbank Dollar	0	2	2
Mark	0	0	9½

POLAND.

Gold Ducat	0	9	0
Rix Dollar	0	4	0
Florin.....	0	0	5½

PORTUGAL.

Gold Joannose, 1000 Reis ...	1	16	0
Silver Crown, 100 Reis ...	0	4	8
— Crusado 400 Reis ...	0	2	3

PRUSSIA.

	£	s.	d.
Gold Frederick	0	16	9
Silver Thaler	0	3	0
Silbergroschen	0	0	1½

ROME.

Gold 10-Scudi Piece	2	2	6
Silver Scudo, 10 Paoli	0	4	2
Paoli, 10 Bajochi	0	0	5

RUSSIA.

Gold Half Imperial	0	16	3
Ducat.....	0	9	2
Silver Rouble	0	3	2

SAXONY.

August d'or	0	16	2
Thaler Specie	0	3	11
— Currency.....	0	3	0

SPAIN.

Gold Doubloon.....	3	6	6
— Pistole	0	16	6
Silver Dollar.....	0	4	3

SWEDEN.

Gold Ducat	0	9	2
Silver Species	0	4	4
— Half Species.....	0	2	2
Rix Dollar Banco, 48 Sk....	0	1	8

SWITZERLAND.

Gold Double Pistole	1	17	0
Four-Franc Piece	0	4	8
1-Franc do., 10 Batzen.....	0	1	1½

TURKEY.

Gold New Double Sequin...	1	16	0
— Sequin	0	18	0
Spanish Dollar.....	0	4	2
Piastre, 40 Paras.....	0	0	2½

TIDAL CONSTANTS.

By the following Table, the time of High Water may be found in *Local Mean Time*, for any day of the year, by *adding to or subtracting from* the various Ports of reference.

GREAT BRITAIN.

West Coast, &c.				East Coast, &c.			
		H.	M.			H.	M.
St. Ives	sub.	1	48	Inverness	sub.	1	49
Newquay	sub.	1	28	Aberdeen	sub.	1	7
Padstow	sub.	1	19	Dundee	add	0	25
Boscastle	sub.	1	17	Perth	add	1	28
Budehaven	sub.	0	58	Leith	add	0	10
Lundy Island ..	sub.	1	17	Berwick	add	0	11
Barnstaple Bridge	add	0	41	Blyth	add	1	8
Appledore	add	0	11	Tynemouth Bar..	add	1	13
Bideford	add	0	20	North Shields ..	add	1	16
Minehead	sub.	1	12	Newcastle	add	2	16
Bridgewater Bar	sub.	0	52	Sunderland	add	1	15
Weston-super-Mare	sub.	0	48	Seaham	add	1	17
Flatholm Island..	sub.	0	48	Hartlepool	add	1	21
Portishead	sub.	0	15	Whitby	add	1	38
Kingroad	sub.	0	35	Scarborough ..	add	2	4
Chepstow	sub.	0	1	Flamborough head	add	2	23
Charmarthen Bar..	sub.	0	22	Great Grimsby..	add	3	29
Tenby	sub.	0	32	Hull	add	4	19
St. Ann's lighthouse	sub.	0	36	Goole	add	5	37
Fishguard	add	0	24	Lynn	add	3	53
Cardigan	add	0	29	Yarmouth Road..	sub.	4	52
Newquay	add	0	58	Lowestoft	sub.	4	10
Aberystwith ..	add	0	59	Orfordness	sub.	2	52
Aberdovey	add	1	28	Margate	sub.	2	27
Port Madoc	add	0	58	Nore	sub.	1	37
Caernarvon	sub.	2	2	Chatham	sub.	1	5
Holyhead	sub.	1	24	Gravesend	sub.	0	57
Amlwch	sub.	1	5	Woolwich	sub.	0	30
Beaumaris	sub.	1	3	London Docks ..	sub.	0	10
Chester	sub.	1	5				
Fleetwood	sub.	0	23				
Whitehaven	sub.	0	21				
Douglas, I. of Man	sub.	0	23				
Ramsey	sub.	0	23				
Peel	sub.	0	27				
Kircudbright ..	sub.	0	25				
Ardrossan	add	0	10				
Glasgow	add	1	50				

South Coast.

Ramsgate	add	5	12	To Milford Haven.
Deal	add	4	43	
Folkestone	add	4	35	
Hastings	add	4	21	
Beachy Head ..	add	4	48	
Shoreham	add	5	2	

Tidal Constants, continued.

	H. M.		H. M.
Arundel Bar .. add	5 3	Lyme Regis .. sub.	0 11
Littlehampton .. add	5 4	Exmouth sub.	0 11
Chichester add	4 58	Torbay sub.	0 32
Bembridge Point add	4 28	Teignmouth .. sub.	0 32
Portsmouth add	5 9	Dartmouth.. .. sub.	0 16
Southampton .. add	3 58	Devonport sub.	0 49
West Cowes add	4 13	Plymouth Break. sub.	0 55
Yarmouth add	3 28	Fowey sub.	1 18
Needles Point .. add	3 14	Mevagizey.. .. sub.	1 28
Christchurch add	2 28	Falmouth sub.	1 35
Poole add	2 38	Lizard sub.	1 32
Portland add	0 29	Penzance sub.	2 2
Bridport sub.	0 27	Scilly I.(St.Mary) sub.	2 5

To or from Milford Haven.

From Milford Haven.

IRELAND.

Skull sub.	2 30	Tor Point sub.	1 55
Crookhaven .. sub.	2 23	Lough Larne .. sub.	0 47
Dunmanus Harb. sub.	2 35	Belfast sub.	0 52
Dunbeacon .. sub.	2 41	Donaghadee .. sub.	0 22
Black Ball harbour sub.	2 52	Lough Strangford sub.	0 42
Castletown.. .. sub.	2 18	Warren Point .. sub.	0 25
Bantry Harbour.. sub.	2 45	Carlingford Bar.. sub.	0 55
West Cove sub.	2 40	Howth Harbour.. sub.	0 26
Valentia Harbour sub.	2 50	Dublin Bar sub.	0 23
Kilbaba sub.	2 16	Kingstown.. .. sub.	0 25
Kilrush sub.	1 50	Wicklow sub.	1 6
Carrigaholt .. sub.	1 48	Arklow sub.	2 50
Tarbert sub.	1 35	Wexford add	0 49
Foyne's Island .. sub.	0 57	New Ross sub.	0 28
Mellon sub.	0 31	Waterford (bridge) sub.	0 26
Limerick sub.	0 16	Do. (Duncan fort) sub.	1 12
Galway sub.	1 57	Dunmore sub.	1 5
Roundstone .. sub.	2 4	Ballinacourty, Dun-	
Achillbeg sub.	1 18	garven sub.	1 20
Broadhaven Harb. sub.	1 32	Youghal sub.	1 18
Westport sub.	1 35	Ballycottin.. .. sub.	1 38
Sligo Bay sub.	1 14	Cork sub.	1 34
Donegal Harbour sub.	1 14	Queenstown .. sub.	1 31
Killibegs sub.	1 16	Kinsale sub.	1 49
Lough Rossmore sub.	1 12	Courtmaeskerry.. sub.	1 56
Sheephaven .. sub.	1 0	Castletownsend .. sub.	2 11
Londonderry .. add	1 29	Baltimore sub.	2 9
Coleraine sub.	0 8	Cape Clear.. .. sub.	2 32

To or from Milford Haven.

From Liverpool.

To or from Milford Haven.

Tidal Constants, continued.

FOREIGN AND COLONIAL

	H. M.		H. M.
Adelaide, port, Aus. sub.	0 48	Ichabo sub.	5 32
Aden, Arabia .. add	3 13	Jackson, Port .. add	1 43
Auckland add	0 33	Jersey, St. Hellier sub.	4 7
Bayonne Bar. Fr. sub.	2 47	Malaga add	5 28
Bilbao, Spain .. sub.	3 32	Malo, St. sub.	0 27
Bombay add	5 8	Melbourne sub.	5 12
Bordeaux add	0 18	Moreton Bay .. add.	2 28
Boston, U.S. .. add	4 55	Natal, Port. sub.	2 2
Botany Bay add	1 43	Nelson, New Zea. add	3 18
Boulogne add	4 53	New York add	1 41
Brest sub.	2 45	Oporto sub.	4 2
Buenos Ayres .. add	5 28	Ostend add	5 53
Cadiz, Spain .. sub.	4 47	Pernambuco .. sub.	2 9
Calais add	5 17	Philadelphia .. sub.	5 14
Calcutta sub.	4 2	Philip, Port, entr. sub.	5 2
Callao Bay sub.	0 45	Portland, U.S. .. add	4 53
Canton River, ent. add	3 28	Quebec add	0 6
Charlestown, U.S. add	0 41	Richmond, U.S. .. sub.	2 4
Cherbourg add	1 17	Rio Janeiro .. sub.	3 32
Copiapó add	1 58	Rochelle sub.	3 1
Coquimbo add	2 36	Royal, Port add	4 28
Delaware, U.S. .. add	1 28	Rotterdam sub.	2 47
Dieppe add	4 34	Rouen sub.	4 4
Francisco, San .. add	4 2	Savannah, City .. add	1 41
Galle, Point de .. sub.	4 32	Senegal add	3 58
Gambia River .. add	1 38	Singapore add	3 13
Geelong sub.	3 42	Suez Bay sub.	4 32
Gibraltar sub.	4 12	Sidney, Australia add	2 6
Guernsey, St. Peter add	0 16	Table Bay sub.	3 52
Hamburg sub.	1 3	Tangier sub.	4 50
Hong Kong add	3 43	Ushant sub.	3 0
Horn, Cape sub.	2 22	Valparaiso add	3 0

To or from Milford Haven.

To or from Milford Haven.

MOON'S RISING AND SETTING.

At four days old it sets at, and shines till, about 10 at night.	16 at a quarter after.....
5 about 11	17 at half after
6 about 12	18 .....about..... 10
7 at near 1 in the morning.	19 .....about..... 11
14 at full it rises about 6 in the evening.	20 .....about..... 12

THE
BRISTOL CHANNEL
ALMANACK
AND
TIDE TABLES;
TOGETHER WITH
PORT CHARGES,
PILOTAGE REGULATIONS,
&c., &c.,
FOR THE YEAR
1867.

This Year's issue contains important additions of Astronomical Tables, sufficient for all ordinary purposes of Navigation.

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NOTICE.

The Port Charges, and other information, have been collected with as much care as circumstances would permit, but should any errors or omissions be discovered, the Publishers will be glad to have them pointed out, that they may be corrected in future years; and any suggestions for the improvement of the work will also be gladly received, as it is their desire to make it in every respect as accurate and complete as possible.

The work comprises:—

Calendar and Astronomical Tables ..pages	4 to 15
Tide Tables	pages 18 to 65
Port Charges, &c.	pages 66 to 103
Tidal Constants	pages 103 to 106

Swansea, Nov., 1866.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's		Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S								Equation of Time.	Diff. for 1 hour			
		Southings	or Meridian Passage.		Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter.‡									
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s
1	Tue	21	16 7	1	11	18	46	24	23	1	30	S	12	25	16	18	1.187
2	Wed	22	3 2	1	11	18	50	49	22	56	22		13	40	16	18	1.174
3	Thu	22	50.6	1	11	18	55	14	22	50	47		14	54	16	18	1.159
4	Fri	23	38.6	1	11	18	59	38	22	44	45		15	67	16	18	1.143
5	Sat	conjunc		1	11	19	4	2	22	38	15		16	79	16	18	1.125
6	Sun	0	26 8	1	11	19	8	25	22	31	19		17	91	16	18	1.106
7	Mon	1	14 7	1	11	19	12	48	22	23	56		19	02	16	18	1.086
8	Tue	2	2 3	1	11	19	17	10	22	16	7		20	11	16	18	1.064
9	Wed	2	49 4	1	11	19	21	32	22	7	51		21	20	16	18	1.041
10	Thu	3	36.3	1	11	19	25	53	21	59	10		22	28	16	18	1.018
11	Fri	4	23.4	1	10	19	30	14	21	50	3		23	35	16	18	0.993
12	Sat	5	11.5	1	10	19	34	34	21	40	30		24	40	16	18	0.967
13	Sun	6	1 2	1	10	19	38	54	21	30	32		25	44	16	18	0.940
14	Mon	6	53.3	1	10	19	43	12	21	20	9		26	47	16	18	0.912
15	Tue	7	48.4	1	10	19	47	30	21	9	22		27	49	16	18	0.883
16	Wed	8	46.4	1	10	19	51	48	20	58	10		28	50	16	18	0.854
17	Thu	9	46.8	1	10	19	56	5	20	46	35		29	49	16	18	0.824
18	Fri	10	48.3	1	10	20	0	21	20	34	36		30	47	16	17	0.794
19	Sat	11	49.0	1	10	20	4	36	20	22	13		31	43	16	17	0.763
20	Sun	12	47.5	1	10	20	8	50	20	9	28		32	38	16	17	0.732
21	Mon	13	43.0	1	10	20	13	4	19	56	20		33	32	16	17	0.700
22	Tue	14	35.1	1	9	20	17	17	19	42	49		34	24	15	17	0.668
23	Wed	15	24.4	1	9	20	21	29	19	28	57		35	15	16	17	0.636
24	Thu	16	11.5	1	9	20	25	41	19	14	43		36	04	16	17	0.604
25	Fri	16	57.2	1	9	20	29	51	19	0	7		36	92	16	17	0.572
26	Sat	17	42.2	1	9	20	34	1	18	45	11		37	78	16	17	0.539
27	Sun	18	27.1	1	9	20	38	10	18	29	55		38	63	16	17	0.506
28	Mon	19	12.4	1	9	20	42	19	18	14	18		39	46	16	16	0.473
29	Tue	19	58.5	1	9	20	46	26	17	58	21		40	27	16	16	0.440
30	Wed	20	45.4	1	8	20	50	33	17	42	5		41	07	16	16	0.406
31	Thu	21	33.1	1	8	20	54	39	17	25	30		41	85	16	16	0.372

Subtract from Mean Time.

* Mean Time may be found by subtracting 0^s.19 from the *Sidereal*.
 † The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's		Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S										Equation of Time.	Diff. for 1 hour		
		Southings	or Meridian Passage.		Apparent Right Ascension.		Apparent Declination.		Diff. for 1 hour	Semi- diam- eter.‡								
		h	m		m	s	h	m	s	°	'	"	"	'			"	m	s	s
1	Fri	22	21.4	1	8	20	58	44	17	8	37	S	42.61	16	16	13	50	0.339
2	Sat	23	9.8	1	8	21	2	48	16	51	26		43.36	16	16	13	58	0.305
3	Sun	23	58.1	1	8	21	6	52	16	33	57		44.08	16	15	14	5	0.271
4	Mon	conjunc		1	8	21	10	54	16	16	10		44.79	16	15	14	11	0.237
5	Tue	0	46.1	1	8	21	14	56	15	58	7		45.48	16	15	14	16	0.203
6	Wed	1	33.9	1	8	21	18	57	15	39	48		46.16	16	15	14	20	0.169
7	Thu	2	21.7	1	8	21	22	57	15	21	12		46.81	16	15	14	24	0.135
8	Fri	3	9.9	1	7	21	26	57	15	2	21		47.45	16	15	14	27	0.101
9	Sat	3	59.1	1	7	21	30	55	14	43	14		48.08	16	14	14	29	0.067
10	Sun	4	49.9	1	7	21	34	53	14	23	53		48.69	16	14	14	30	0.034
11	Mon	5	42.8	1	7	21	38	50	14	4	18		49.27	16	14	14	31	0.001
12	Tue	6	38.1	1	7	21	42	46	13	44	29		49.84	16	14	14	30	0.032
13	Wed	7	35.5	1	7	21	46	42	13	24	26		50.39	16	14	14	29	0.064
14	Thu	8	34.3	1	7	21	50	36	13	4	11		50.92	16	14	14	27	0.096
15	Fri	9	33.4	1	7	21	54	30	12	43	42		51.44	16	13	14	25	0.127
16	Sat	10	31.4	1	7	21	58	23	12	23	2		51.94	16	13	14	21	0.158
17	Sun	11	27.5	1	6	22	2	16	12	2	10		52.42	16	13	14	17	0.188
18	Mon	12	21.0	1	6	22	6	7	11	41	6		52.89	16	13	14	12	0.217
19	Tue	13	12.0	1	6	22	9	58	11	19	51		53.34	16	13	14	7	0.246
20	Wed	14	0.9	1	6	22	13	49	10	58	26		53.77	16	12	14	0	0.274
21	Thu	14	48.1	1	6	22	17	38	10	36	50		54.19	16	12	13	53	0.301
22	Fri	15	34.4	1	6	22	21	27	10	15	5		54.59	16	12	13	46	0.327
23	Sat	16	20.1	1	6	22	25	16	9	53	10		54.97	16	12	13	38	0.352
24	Sun	17	5.9	1	6	22	29	4	9	31	6		55.34	16	11	13	29	0.377
25	Mon	17	52.0	1	6	22	32	51	9	8	53		55.70	16	11	13	20	0.401
26	Tue	18	38.7	1	6	22	36	38	8	46	32		56.03	16	11	13	10	0.424
27	Wed	19	25.9	1	6	22	40	24	8	24	4		56.35	16	11	12	59	0.446
28	Thu	20	13.7	1	6	22	44	9	8	1	27		56.65	16	10	12	48	0.468

Subtract from Mean Time.

* Mean Time may be found by subtracting 0s.18 from the *Sidereal*.
 ‡ The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.	Sideral Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S				Equation of Time.	Diff. for 1 hour
				Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter.†		
		h m	m s h m s	° ' "	"	"	"	m s	s
1	Fri	21 19	1 522 47 54	7 38 44 S	56° 94'	16 10	12 37	0.489	
2	Sat	21 50.2	1 522 51 39	7 15 54	57° 21'	16 10	12 25	0.509	
3	Sun	22 38.5	1 522 55 23	6 52 58	57° 45'	16 10	12 12	0.529	
4	Mon	23 27.0	1 522 59 7	6 29 56	57° 68'	16 9	12 0	0.548	
5	Tue	conjunc	1 523 2 50	6 6 49	57° 90'	16 9	11 46	0.567	
6	Wed	0 15.6	1 523 6 32	5 43 36	58° 10'	16 9	11 32	0.585	
7	Thu	1 4.7	1 523 10 15	5 20 19	58° 29'	16 9	11 18	0.602	
8	Fri	1 54.7	1 523 13 57	4 56 58	58° 46'	16 8	11 3	0.618	
9	Sat	2 46.1	1 523 17 38	4 33 33	58° 61'	16 8	10 48	0.634	
10	Sun	3 39.2	1 523 21 19	4 10 5	58° 74'	16 8	10 33	0.649	
11	Mon	4 34.1	1 523 25 0	3 46 33	58° 86'	16 8	10 17	0.663	
12	Tue	5 30.7	1 523 28 41	3 22 59	58° 96'	16 7	10 1	0.677	
13	Wed	6 28.2	1 523 32 21	2 59 22	59° 05'	16 7	9 45	0.690	
14	Thu	7 25.9	1 523 36 1	2 35 44	59° 12'	16 7	9 28	0.702	
15	Fri	8 22.8	1 523 39 40	2 12 4	59° 17'	16 7	9 11	0.713	
16	Sat	9 17.9	1 523 43 20	1 48 23	59° 21'	16 6	8 54	0.724	
17	Sun	10 11.0	1 523 46 59	1 24 42	59° 23'	16 6	8 36	0.733	
18	Mon	11 1.9	1 523 50 37	1 1 0	59° 24'	16 6	8 19	0.741	
19	Tue	11 51.0	1 523 54 16	0 37 17	59° 24'	16 6	8 1	0.748	
20	Wed	12 38.7	1 523 57 55	0 13 36 S	59° 22'	16 5	7 43	0.754	
21	Thu	13 25.5	1 4 0 1 33	0 10 6 N	59° 19'	16 5	7 25	0.759	
22	Fri	14 11.9	1 4 0 5 11	0 33 46	59° 14'	16 5	7 6	0.763	
23	Sat	14 58.1	1 4 0 8 49	0 57 25	59° 08'	16 4	6 48	0.766	
24	Sun	15 44.6	1 4 0 12 28	1 21 3	59° 01'	16 4	6 30	0.768	
25	Mon	16 31.3	1 4 0 16 6	1 44 38	58° 92'	16 4	6 11	0.769	
26	Tue	17 18.4	1 4 0 19 44	2 8 11	58° 82'	16 4	5 53	0.770	
27	Wed	18 5.9	1 4 0 23 22	2 31 42	58° 70'	16 3	5 34	0.770	
28	Thu	18 53.5	1 4 0 27 0	2 55 9	58° 56'	16 3	5 16	0.769	
29	Fri	19 41.1	1 4 0 30 38	3 18 34	58° 41'	16 3	4 57	0.766	
30	Sat	20 28.9	1 4 0 34 16	3 41 54	58° 25'	16 2	4 39	0.763	
31	Sun	21 16.9	1 4 0 37 55	4 5 10	58° 08'	16 2	4 21	0.760	

Subtract from Mean Time.

* Mean Time may be found by subtracting 0s.18 from the Sideral.
 † The Semidiameter for Apparent Noon may be assumed the same
 as that for Mean Noon.

AT GREENWICH MEAN NOON.

Day of the Week.	Moon's		Sideral Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*		THE SUN'S										Equation of Time.	Diff. for 1 hour	
	South- ing	or Meridian Passage.			Apparent Right Ascension.			Apparent Declination.			Diff. for 1 hour	Semi- diam- eter.‡					
	h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s	
Mon	22	5.2	1	4	0	41	33	4	28	22	N	57.88	16	2	4	2	0.755
Tue	22	54.3	1	4	0	45	11	4	51	29		57.67	16	2	3	44	0.750
Wed	23	44.6	1	5	0	48	50	5	14	31		57.45	16	1	3	26	0.744
Thu	conjunc		1	5	0	52	29	5	37	28		57.21	16	1	3	9	0.737
Fri	0	36.6	1	5	0	56	8	6	0	18		56.96	16	1	2	51	0.730
Sat	1	30.5	1	5	0	59	47	6	23	3		56.70	16	0	2	34	0.722
Sun	2	26.5	1	5	1	3	26	6	45	40		56.42	16	0	2	16	0.714
Mon	3	24.2	1	5	1	7	6	7	8	11		56.12	16	0	1	59	0.705
Tue	4	22.8	1	5	1	10	45	7	30	35		55.81	16	0	1	42	0.696
Wed	5	21.3	1	5	1	14	25	7	52	51		55.48	15	59	1	26	0.686
Thu	6	18.6	1	5	1	18	5	8	14	58		55.14	15	59	1	9	0.675
Fri	7	13.9	1	5	1	21	46	8	36	58		54.79	15	59	0	53	0.664
Sat	8	6.7	1	5	1	25	27	8	58	49		54.42	15	59	0	38	0.652
Sun	8	57.2	1	5	1	29	8	9	20	30		54.03	15	58	0	22	0.639
Mon	9	45.8	1	5	1	32	49	9	42	3		53.64	15	58	0	7	0.626
Tue	10	33.0	1	5	1	36	31	10	3	25		53.23	15	58	0	8	0.611
Wed	11	19.4	1	5	1	40	13	10	24	38		52.80	15	58	0	23	0.596
Thu	12	5.4	1	5	1	43	55	10	45	40		52.36	15	57	0	37	0.580
Fri	12	51.5	1	5	1	47	38	11	6	32		51.92	15	57	0	50	0.564
Sat	13	38.0	1	5	1	51	21	11	27	13		51.46	15	57	1	4	0.546
Sun	14	24.8	1	5	1	55	5	11	47	42		50.98	15	57	1	17	0.527
Mon	15	12.0	1	5	1	58	49	12	8	0		50.49	15	56	1	29	0.509
Tue	15	59.3	1	5	2	2	34	12	28	6		49.99	15	56	1	41	0.490
Wed	16	46.7	1	6	2	6	19	12	48	0		49.48	15	56	1	53	0.470
Thu	17	33.9	1	6	2	10	4	13	7	42		48.95	15	55	2	4	0.449
Fri	18	20.9	1	6	2	13	50	13	27	10		48.41	15	55	2	14	0.428
Sat	19	7.8	1	6	2	17	37	13	46	26		47.85	15	55	2	24	0.407
Sun	19	55.0	1	6	2	21	24	14	5	27		47.28	15	55	2	34	0.385
Mon	20	42.8	1	6	2	25	11	14	24	15		46.70	15	54	2	43	0.363
Tue	21	31.8	1	6	2	28	59	14	42	49		46.11	15	54	2	51	0.341

* Mean Time may be found by subtracting 0s.18 from the *Sidereal*.
 ‡ The Semidiameter for *Apparent* Noon may be assumed the same
 as that for *Mean* Noon.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.	Sider ^l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S								Equation of Time.	Diff. for 1 hour
				Apparent Right Ascension.	Apparent Declination.			Diff. for 1 hour	Semi- diam- eter.‡				
		h m	m s	h m s	° ' "	' "	' "	' "	' "	m s	s		
1	Wed	22 22·7	1 6	2 32 48	15 1 9	N	45·50	15 54	2 59	0·318			
2	Thu	23 15·9	1 6	2 36 37	15 19 13		44·88	15 54	3 6	0·295			
3	Fri	conjunc	1 6	2 40 27	15 37 3		44·24	15 54	3 13	0·272			
4	Sat	0 12·0	1 6	2 44 17	15 54 37		43·59	15 53	3 19	0·248			
5	Sun	1 10·6	1 6	2 48 8	16 11 55		42·93	15 53	3 25	0·225			
6	Mon	2 11·0	1 6	2 52 0	16 28 57		42·25	15 53	3 30	0·202			
7	Tue	3 11·9	1 7	2 55 52	16 45 43		41·56	15 53	3 35	0·179			
8	Wed	4 11·7	1 7	2 59 44	17 2 12		40·86	15 52	3 39	0·155			
9	Thu	5 9·2	1 7	3 3 37	17 18 24		40·14	15 52	3 42	0·133			
10	Fri	6 3·7	1 7	3 7 31	17 34 18		39·41	15 52	3 45	0·110			
11	Sat	6 55·2	1 7	3 11 25	17 49 55		38·66	15 52	3 47	0·087			
12	Sun	7 44·2	1 7	3 15 20	18 5 14		37·91	15 52	3 49	0·064			
13	Mon	8 31·2	1 7	3 19 15	18 20 15		37·15	15 51	3 51	0·041			
14	Tue	9 17·1	1 7	3 23 11	18 34 57		36·37	15 51	3 51	0·017			
15	Wed	10 2·5	1 7	3 27 7	18 49 20		35·58	15 51	3 51	0·006			
16	Thu	10 48·0	1 7	3 31 4	19 3 25		34·78	15 51	3 51	0·029			
17	Fri	11 33·8	1 7	3 35 2	19 17 10		33·97	15 51	3 50	0·052			
18	Sat	12 20·3	1 7	3 39 0	19 30 35		33·15	15 50	3 48	0·076			
19	Sun	13 7·3	1 7	3 42 59	19 43 40		32·31	15 50	3 46	0·099			
20	Mon	13 54·6	1 8	3 46 58	19 56 26		31·47	15 50	3 44	0·122			
21	Tue	14 42·1	1 8	3 50 58	20 8 51		30·62	15 50	3 41	0·145			
22	Wed	15 29·3	1 8	3 54 58	20 20 56		29·76	15 50	3 37	0·168			
23	Thu	16 16·0	1 8	3 58 59	20 32 39		28·89	15 49	3 32	0·190			
24	Fri	17 2·3	1 8	4 3 0	20 44 2		28·01	15 49	3 28	0·212			
25	Sat	17 48·4	1 8	4 7 2	20 55 3		27·11	15 49	3 22	0·234			
26	Sun	18 34·7	1 8	4 11 5	21 5 43		26·21	15 49	3 16	0·255			
27	Mon	19 21·7	1 8	4 15 7	21 16 1		25·30	15 49	3 10	0·276			
28	Tue	20 10·2	1 8	4 19 11	21 25 57		24·38	15 49	3 3	0·297			
29	Wed	21 1·1	1 8	4 23 15	21 35 31		23·45	15 49	2 56	0·317			
30	Thu	21 54·9	1 8	4 27 19	21 44 42		22·51	15 48	2 48	0·336			
31	Fri	22 52·0	1 8	4 31 24	21 53 31		21·56	15 48	2 40	0·355			

Add to Mean Time.

* Mean Time may be found by subtracting 0·18 from the *Sideral*.† The Semidiameter for *Apparent* Noon may be assumed the same as that for *Mean* Noon.

JUNE, 1867.

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AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.	Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S								Equation of Time.	Diff. for 1 hour
				Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter.†						
1	Sat	h m	m s	h m s	° ' "	° ' "	"	' "	"	m s	s		
1	Sat	23 52·3	1 8	4 35 29	22 1 58'N	20·61	15 48	2 31	0·372				
2	Sun	conjunc	1 8	4 39 35	22 10 1	19·65	15 48	2 22	0·389				
3	Mon	0 54·5	1 8	4 43 41	22 17 41	18·69	15 48	2 12	0·405				
4	Tue	1 57·1	1 9	4 47 48	22 24 58	17·71	15 48	2 2	0·420				
5	Wed	2 58·0	1 9	4 51 54	22 31 51	16·73	15 48	1 52	0·434				
6	Thu	3 55·9	1 9	4 56 1	22 38 21	15·75	15 47	1 42	0·446				
7	Fri	4 50·2	1 9	5 0 9	22 44 27	14·75	15 47	1 31	0·458				
8	Sat	5 41·3	1 9	5 4 17	22 50 9	13·75	15 47	1 20	0·469				
9	Sun	6 29·6	1 9	5 8 25	22 55 26	12·74	15 47	1 8	0·480				
10	Mon	7 16·1	1 9	5 12 33	23 0 20	11·73	15 47	0 57	0·489				
11	Tue	8 1·5	1 9	5 16 41	23 4 50	10·72	15 47	0 45	0·497				
12	Wed	8 46·6	1 9	5 20 50	23 8 55	9·70	15 47	0 33	0·505				
13	Thu	9 31·9	1 9	5 24 58	23 12 35	8·68	15 47	0 20	0·512				
14	Fri	10 17·8	1 9	5 29 7	23 15 51	7·65	15 47	0 8	0·518				
15	Sat	11 4·3	1 9	5 33 16	23 18 42	6·63	15 47	0 4	0·524				
16	Sun	11 51·5	1 9	5 37 26	23 21 9	5·60	15 47	0 17	0·529				
17	Mon	12 39·0	1 9	5 41 35	23 23 11	4·57	15 46	0 30	0·532				
18	Tue	13 26·4	1 9	5 45 44	23 24 49	3·54	15 46	0 43	0·535				
19	Wed	14 13·4	1 9	5 49 54	23 26 1	2·51	15 46	0 55	0·537				
20	Thu	14 59·8	1 9	5 54 3	23 26 49	1·48	15 46	1 8	0·538				
21	Fri	15 45·6	1 9	5 58 13	23 27 12	0·44	15 46	1 21	0·539				
22	Sat	16 31·1	1 9	6 2 22	23 27 10	0·59	15 46	1 34	0·538				
23	Sun	17 16·8	1 9	6 6 32	23 26 44	1·63	15 46	1 47	0·536				
24	Mon	18 3·3	1 9	6 10 41	23 25 52	2·66	15 46	2 0	0·534				
25	Tue	18 51·4	1 9	6 14 50	23 24 36	3·69	15 46	2 13	0·530				
26	Wed	19 42·0	1 9	6 19 0	23 22 55	4·72	15 46	2 25	0·526				
27	Thu	20 35·8	1 9	6 23 9	23 20 50	5·75	15 46	2 38	0·521				
28	Fri	21 33·2	1 9	6 27 18	23 18 19	6·77	15 46	2 50	0·515				
29	Sat	22 33·8	1 9	6 31 27	23 15 25	7·79	15 46	3 3	0·508				
30	Sun	23 36·4	1 9	6 35 35	23 12 5	8·81	15 46	3 15	0·500				

* Mean Time may be found by subtracting 0s·19 from the *Sidereal*.

† The Semidiameter for *Apparent* Noon may be assumed the same as that for *Mean* Noon.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.	Sideral Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S				Equation of Time.	Diff. for 1 hour
				Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter. ‡		
		h m	m s	h m s	° ' "	"	' "	m s	s
1	Mon	conjunc	1 9	6 39 44	23 8 22 N	9·82	15 46	3 27	0·490
2	Tue	0 39 3	1 9	6 43 52	23 4 14	10·83	15 46	3 38	0·479
3	Wed	1 40 4	1 9	6 48 0	22 59 42	11·83	15 46	3 50	0·468
4	Thu	2 38·3	1 9	6 52 7	22 54 46	12·83	15 46	4 1	0·455
5	Fri	3 32·7	1 9	6 56 15	22 49 27	13·83	15 46	4 12	0·441
6	Sat	4 23·8	1 9	7 0 22	22 43 43	14·82	15 46	4 22	0·425
7	Sun	5 12·3	1 9	7 4 28	22 37 36	15·80	15 46	4 32	0·409
8	Mon	5 59 0	1 8	7 8 34	22 31 5	16·78	15 46	4 42	0·393
9	Tue	6 44·7	1 8	7 12 40	22 24 10	17·75	15 46	4 51	0·376
10	Wed	7 30·1	1 8	7 16 46	22 16 53	18·71	15 46	5 0	0·358
11	Thu	8 15·7	1 8	7 20 51	22 9 13	19·67	15 46	5 8	0·340
12	Fri	9 1·9	1 8	7 24 55	22 1 9	20·62	15 46	5 16	0·320
13	Sat	9 48·7	1 8	7 28 59	21 52 43	21·55	15 46	5 23	0·300
14	Sun	10 36·1	1 8	7 33 3	21 43 55	22·49	15 46	5 30	0·281
15	Mon	11 23·6	1 8	7 37 6	21 34 44	23·41	15 46	5 37	0·260
16	Tue	12 11·0	1 8	7 41 8	21 25 12	24·32	15 46	5 43	0·239
17	Wed	12 57·9	1 8	7 45 10	21 15 17	25·23	15 46	5 48	0·218
18	Thu	13 44·1	1 8	7 49 12	21 5 1	26·13	15 46	5 53	0·196
19	Fri	14 29·9	1 8	7 53 13	20 54 23	27·02	15 47	5 58	0·174
20	Sat	15 15·3	1 8	7 57 13	20 43 24	27·89	15 47	6 2	0·151
21	Sun	16 1·1	1 8	8 1 13	20 32 4	28·76	15 47	6 5	0·129
22	Mon	16 47·7	1 7	8 5 12	20 20 24	29·62	15 47	6 8	0·106
23	Tue	17 36·0	1 7	8 9 11	20 8 23	30·47	15 47	6 10	0·083
24	Wed	18 26·7	1 7	8 13 10	19 56 1	31·31	15 47	6 12	0·060
25	Thu	19 20·5	1 7	8 17 7	19 43 20	32·14	15 47	6 13	0·036
26	Fri	20 17·6	1 7	8 21 4	19 30 19	32·96	15 47	6 14	0·013
27	Sat	21 17·6	1 7	8 25 1	19 16 58	33·76	15 47	6 14	0·011
28	Sun	22 19·3	1 7	8 28 57	19 3 19	34·55	15 47	6 13	0·035
29	Mon	23 20·9	1 7	8 32 52	18 49 20	35·33	15 47	6 12	0·060
30	Tue	conjunc	1 7	8 36 47	18 35 3	36·10	15 48	6 10	0·085
31	Wed	0 20·9	1 7	8 40 41	18 20 27	36·86	15 48	6 8	0·110

Subtract from Mean Time.

* Mean Time may be found by subtracting 0s·19 from the Sidereal.

‡ The Semidiameter for Apparent Noon may be assumed the same as that for Mean Noon.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's		Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S								Equation of Time.	Diff. for 1 hour			
		Southings	or Meridian Passage.		Apparent Right Ascension.			Apparent Declination.			Diff. for 1 hour	Semi- diam- eter.‡					
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s
1	Thu	1	18 0	1	7	8	44	35	18	5	33	N	37	60	15	48	0.136
2	Fri	2	12 0	1	7	8	48	28	17	50	22		38	34	15	48	0.161
3	Sat	3	3 2	1	6	8	52	20	17	34	53		39	06	15	48	0.187
4	Sun	3	52 0	1	6	8	56	12	17	19	8		39	76	15	48	0.213
5	Mon	4	39 3	1	6	9	0	3	17	3	5		40	46	15	48	0.238
6	Tue	5	25 8	1	6	9	3	54	16	46	45		41	14	15	48	0.264
7	Wed	6	11 9	1	6	9	7	44	16	30	10		41	81	15	49	0.289
8	Thu	6	58 2	1	6	9	11	33	16	13	18		42	47	15	49	0.314
9	Fri	7	44 9	1	6	9	15	22	15	56	11		43	11	15	49	0.339
10	Sat	8	32 1	1	6	9	19	10	15	38	49		43	74	15	49	0.364
11	Sun	9	19 5	1	6	9	22	58	15	21	12		44	36	15	49	0.388
12	Mon	10	7 0	1	6	9	26	44	15	3	19		44	97	15	49	0.412
13	Tue	10	54 3	1	6	9	30	31	14	45	13		45	56	15	50	0.435
14	Wed	11	41 2	1	6	9	34	17	14	26	52		46	14	15	50	0.458
15	Thu	12	27 6	1	5	9	38	2	14	8	18		46	71	15	50	0.481
16	Fri	13	13 6	1	5	9	41	47	13	49	30		47	27	15	50	0.503
17	Sat	13	59 7	1	5	9	45	31	13	30	29		47	81	15	50	0.524
18	Sun	14	46 3	1	5	9	49	15	13	11	15		48	34	15	51	0.544
19	Mon	15	33 9	1	5	9	52	58	12	51	48		48	86	15	51	0.564
20	Tue	16	23 3	1	5	9	56	41	12	32	9		49	37	15	51	0.584
21	Wed	17	15 0	1	5	10	0	23	12	12	18		49	85	15	51	0.603
22	Thu	18	9 4	1	5	10	4	5	11	52	15		50	34	15	51	0.621
23	Fri	19	6 3	1	5	10	7	46	11	32	1		50	81	15	52	0.639
24	Sat	20	5 3	1	5	10	11	27	11	11	36		51	26	15	52	0.656
25	Sun	21	5 1	1	5	10	15	8	10	51	0		51	70	15	52	0.672
26	Mon	22	4 4	1	5	10	18	48	10	30	13		52	13	15	52	0.688
27	Tue	23	2 0	1	5	10	22	28	10	9	17		52	54	15	52	0.704
28	Wed	23	57 3	1	5	10	26	7	9	48	11		52	94	15	53	0.719
29	Thu	conjunc		1	5	10	29	47	9	26	55		53	33	15	53	0.734
30	Fri	0	50 1	1	5	10	33	25	9	5	31		53	70	15	53	0.749
31	Sat	1	40 7	1	4	10	37	4	8	43	57		54	05	15	53	0.763

* Mean Time may be found by subtracting 0^m 18 from the *Sidereal*.

† The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.	Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S							Equation of Time.	Diff. for 1 hour
				Apparent Right Ascension.			Apparent Declination.			Diff. for 1 hour			Semi- diam- eter.§
		h m	m s	h m s	° ' "	" ' "	" ' "	m s	s			
1	Sun	2 29·7	1 4	10 40 42	8 22 16	N	54·39	15 53	0 2	0·776		
2	Mon	3 17·6	1 4	10 44 20	8 0 26		54·72	15 54	0 20	0·789		
3	Tue	4 4·9	1 4	10 47 57	7 38 29		55·04	15 54	0 39	0·801		
4	Wed	4 51·9	1 4	10 51 34	7 16 24		55·34	15 54	0 59	0·812		
5	Thu	5 39·0	1 4	10 55 11	6 54 12		55·62	15 54	1 18	0·823		
6	Fri	6 26·3	1 4	10 58 48	6 31 53		55·89	15 55	1 38	0·833		
7	Sat	7 13·7	1 4	11 2 24	6 9 28		56·15	15 55	1 58	0·841		
8	Sun	8 1 2	1 4	11 6 1	5 46 57		56·40	15 55	2 19	0·849		
9	Mon	8 48·5	1 4	11 9 37	5 24 20		56·63	15 55	2 39	0·857		
10	Tue	9 35·5	1 4	11 13 12	5 1 38		56·85	15 56	3 0	0·864		
11	Wed	10 22·3	1 4	11 16 48	4 38 51		57·06	15 56	3 21	0·870		
12	Thu	11 8·8	1 4	11 20 24	4 15 59		57·25	15 56	3 42	0·875		
13	Fri	11 55·5	1 4	11 23 59	3 53 2		57·43	15 56	4 3	0·879		
14	Sat	12 42·7	1 4	11 27 35	3 30 2		57·59	15 57	4 24	0·882		
15	Sun	13 30·8	1 4	11 31 10	3 6 57		57·74	15 57	4 45	0·884		
16	Mon	14 20·3	1 4	11 34 45	2 43 49		57·89	15 57	5 6	0·885		
17	Tue	15 11·8	1 4	11 38 21	2 20 38		58·02	15 57	5 28	0·885		
18	Wed	16 5·5	1 4	11 41 56	1 57 24		58·13	15 58	5 49	0·884		
19	Thu	17 1·2	1 4	11 45 31	1 34 7		58·23	15 58	6 10	0·882		
20	Fri	17 58·6	1 4	11 49 7	1 10 48		58·32	15 58	6 31	0·879		
21	Sat	18 56·7	1 4	11 52 42	0 47 27		58·39	15 58	6 52	0·875		
22	Sun	19 54·4	1 4	11 56 18	0 24 5		58 45	15 59	7 13	0·870		
23	Mon	20 50·9	1 4	11 59 54	0 0 41	N	58·49	15 59	7 34	0·865		
24	Tue	21 45·6	1 4	12 3 30	0 22 44	S	58 52	15 59	7 55	0·859		
25	Wed	22 38·3	1 4	12 7 6	0 46 9		58 54	15 59	8 15	0·852		
26	Thu	23 29·3	1 4	12 10 42	1 9 34		58·54	16 0	8 35	0·845		
27	Fri	conjunc	1 4	12 14 18	1 32 59		58·52	16 0	8 56	0·837		
28	Sat	0 18·8	1 4	12 17 55	1 56 24		58 49	16 0	9 16	0·828		
29	Sun	1 7·4	1 4	12 21 31	2 19 47		58·44	16 1	9 35	0·818		
30	Mon	1 55·4	1 4	12 25 8	2 43 10		58·38	16 1	9 55	0·808		

Add to Mean Time.

* Mean Time may be found by subtracting 0^s·18 from the *Sidereal*.‡ The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.	Sideral Time of the Sun's Semidi- ameter passing the Meridi- an.*	THE SUN'S								Equation of Time.	Diff. for 1 hour			
				Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter.‡	Equation of Time.	Diff. for 1 hour							
h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s	
1	Tue	2 43·2	1 4	12 28 46	3 6 30 S	58·31	16	1 10 14	0·796							
2	Wed	3 31·0	1 4	12 32 23	3 29 49	58·22	16	1 10 33	0·784							
3	Thu	4 18·8	1 4	12 36 1	3 53 5	58·11	16	2 10 52	0·772							
4	Fri	5 6·5	1 4	12 39 39	4 16 19	57·99	16	2 11 10	0·759							
5	Sat	5 54·0	1 5	12 43 18	4 39 29	57·85	16	2 11 28	0·745							
6	Sun	6 41·2	1 5	12 46 57	5 2 36	57·69	16	3 11 46	0·730							
7	Mon	7 28·1	1 5	12 50 36	5 25 39	57·52	16	3 12 3	0·714							
8	Tue	8 14·6	1 5	12 54 16	5 48 37	57·34	16	3 12 20	0·697							
9	Wed	9 0·9	1 5	12 57 56	6 11 31	57·14	16	3 12 37	0·680							
10	Thu	9 47·5	1 5	13 1 36	6 34 21	56·93	16	4 12 53	0·662							
11	Fri	10 34·7	1 5	13 5 17	6 57 4	56·70	16	4 13 9	0·642							
12	Sat	11 23·0	1 5	13 8 58	7 19 43	56·45	16	4 13 24	0·622							
13	Sun	12 12·9	1 5	13 12 40	7 42 15	56·19	16	5 13 38	0·601	Add to Mean Time.						
14	Mon	13 4·9	1 5	13 16 23	8 4 40	55·92	16	5 13 53	0·579							
15	Tue	13 59·3	1 5	13 20 5	8 26 59	55·63	16	5 14 6	0·556							
16	Wed	14 55·7	1 5	13 23 49	8 49 11	55·33	16	5 14 19	0·532							
17	Thu	15 53·6	1 5	13 27 33	9 11 15	55·01	16	6 14 32	0·507							
18	Fri	16 52·1	1 5	13 31 18	9 33 12	54·68	16	6 14 44	0·481							
19	Sat	17 49·8	1 6	13 35 3	9 55 0	54·33	16	6 14 55	0·454							
20	Sun	18 46·0	1 6	13 38 49	10 16 40	53·96	16	6 15 5	0·427							
21	Mon	19 40·2	1 6	13 42 36	10 38 11	53·58	16	7 15 15	0·400							
22	Tue	20 32·2	1 6	13 46 23	10 59 32	53·18	16	7 15 25	0·371							
23	Wed	21 22·3	1 6	13 50 11	11 20 43	52·76	16	7 15 33	0·342							
24	Thu	22 11·2	1 6	13 54 0	11 41 45	52·33	16	7 15 41	0·313							
25	Fri	22 59·2	1 6	13 57 49	12 2 35	51·88	16	8 15 48	0·283							
26	Sat	23 47·0	1 6	14 1 39	12 23 15	51·42	16	8 15 54	0·253							
27	Sun	conjunction	1 6	14 5 30	12 43 43	50·93	16	8 16 0	0·222							
28	Mon	0 34·7	1 6	14 9 22	13 3 59	50·43	16	9 16 5	0·190							
29	Tue	1 22·7	1 7	14 13 14	13 24 4	49·91	16	9 16 9	0·159							
30	Wed	2 10·8	1 7	14 17 7	13 43 55	49·37	16	9 16 13	0·127							
31	Thu	2 59·0	1 7	14 21 1	14 3 33	48·82	16	9 16 15	0·095							

* Mean Time may be found by subtracting 0s·18 from the *Sidereal*.

‡ The Semidiameter for *Apparent* Noon may be assumed the same as that for *Mean* Noon.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage	Sideral Time of the Sun's Semidi- ameter passing the Meridi- an.*	THE SUN'S				Equation of Time.	Diff. for 1 hour
				Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter. †		
		h m	m s	h m s	° ' "	"	' "	m s	s
1	Fri	3 46.9	1 7	14 24 56	14 22 58 S	48 25	16 10	16 17	0.063
2	Sat	4 34.2	1 7	14 28 51	14 42 9	47.66	16 10	16 18	0.030
3	Sun	5 21.0	1 7	14 32 47	15 1 5	47.05	16 10	16 19	0.003
4	Mon	6 7.1	1 7	14 36 45	15 19 47	46.43	16 10	16 18	0.036
5	Tue	6 52.8	1 7	14 40 42	15 38 13	45.79	16 11	16 17	0.070
6	Wed	7 38.4	1 7	14 44 41	15 56 24	45.13	16 11	16 15	0.104
7	Thu	8 24.5	1 8	14 48 40	16 14 19	44.45	16 11	16 12	0.138
8	Fri	9 11.7	1 8	14 52 41	16 31 57	43.76	16 11	16 8	0.172
9	Sat	10 0.7	1 8	14 56 42	16 49 19	43.05	16 12	16 4	0.207
10	Sun	10 52.1	1 8	15 0 44	17 6 23	42.33	16 12	15 58	0.242
11	Mon	11 46.3	1 8	15 4 47	17 23 10	41.59	16 12	15 52	0.277
12	Tue	12 43.4	1 8	15 8 50	17 39 39	40.83	16 12	15 45	0.312
13	Wed	13 42.9	1 8	15 12 55	17 55 49	40.06	16 12	15 37	0.348
14	Thu	14 43.4	1 8	15 17 0	18 11 41	39.27	16 13	15 28	0.384
15	Fri	15 43.4	1 9	15 21 6	18 27 14	38.46	16 13	15 19	0.420
16	Sat	16 41.6	1 9	15 25 13	18 42 27	37.65	16 13	15 8	0.456
17	Sun	17 37.2	1 9	15 29 21	18 57 20	36.82	16 13	14 57	0.492
18	Mon	18 29.9	1 9	15 33 30	19 11 53	35.96	16 13	14 44	0.527
19	Tue	19 20.1	1 9	15 37 40	19 26 6	35.09	16 14	14 31	0.562
20	Wed	20 8.5	1 9	15 41 50	19 39 57	34.21	16 14	14 17	0.597
21	Thu	20 55.8	1 9	15 46 2	19 53 27	33.32	16 14	14 3	0.631
22	Fri	21 42.6	1 9	15 50 14	20 6 35	32.40	16 14	13 47	0.665
23	Sat	22 29.5	1 9	15 54 27	20 19 21	31.47	16 14	13 31	0.699
24	Sun	23 16.8	1 10	15 58 40	20 31 45	30.53	16 15	13 14	0.732
25	Mon	conjunc	1 10	16 2 55	20 43 46	29.57	16 15	12 56	0.764
26	Tue	0 4.5	1 10	16 7 10	20 55 24	28.60	16 15	12 37	0.795
27	Wed	0 52.7	1 10	16 11 26	21 6 38	27.61	16 15	12 17	0.825
28	Thu	1 40.8	1 10	16 15 43	21 17 28	26.61	16 15	11 57	0.855
29	Fri	2 28.6	1 10	16 20 0	21 27 55	25.60	16 15	11 36	0.884
30	Sat	3 15.6	1 10	16 24 18	21 37 56	24.57	16 16	11 15	0.912

Add to Mean Time.

Mean Time may be found by subtracting 0s.19 from the *Sidereal*.
 † The Semidiameter for *Apparent Noon* may be assumed the same
 as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.		Sideral Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S							Equation of Time.	Diff. for 1 hour							
					Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter. ‡												
h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s					
1	Sun	4	1.8	1	10	16	28	37	21	47	33	S	23	53	16	16	10	53	0	938
2	Mon	4	47.2	1	10	16	32	56	21	56	45		22	48	16	16	10	30	0	964
3	Tue	5	32.0	1	10	16	37	16	22	5	32		21	42	16	16	10	6	0	989
4	Wed	6	16.7	1	11	16	41	37	22	13	53		20	34	16	16	9	42	1	012
5	Thu	7	2.0	1	11	16	45	58	22	21	48		19	26	16	16	9	18	1	035
6	Fri	7	48.7	1	11	16	50	20	22	29	17		18	16	16	16	8	53	1	057
7	Sat	8	37.6	1	11	16	54	42	22	36	19		17	06	16	17	8	27	1	078
8	Sun	9	29.5	1	11	16	59	5	22	42	55		15	95	16	17	8	1	1	097
9	Mon	10	24.9	1	11	17	3	28	22	49	4		14	83	16	17	7	34	1	115
10	Tue	11	23.9	1	11	17	7	51	22	54	46		13	70	16	17	7	7	1	133
11	Wed	12	25.5	1	11	17	12	15	23	0	1		12	56	16	17	6	40	1	150
12	Thu	13	28.1	1	11	17	16	40	23	4	48		11	42	16	17	6	12	1	166
13	Fri	14	29.8	1	11	17	21	4	23	9	8		10	27	16	17	5	44	1	180
14	Sat	15	28.9	1	11	17	25	29	23	13	1		9	11	16	17	5	16	1	193
15	Sun	16	24.6	1	11	17	29	55	23	16	25		7	95	16	17	4	47	1	205
16	Mon	17	17.1	1	11	17	34	20	23	19	22		6	79	16	18	4	18	1	216
17	Tue	18	6.9	1	11	17	38	46	23	21	51		5	62	16	18	3	48	1	226
18	Wed	18	54.7	1	11	17	43	12	23	23	52		4	45	16	18	3	19	1	234
19	Thu	19	41.4	1	11	17	47	38	23	25	24		3	28	16	18	2	49	1	241
20	Fri	20	27.7	1	11	17	52	5	23	26	29		2	10	16	18	2	19	1	246
21	Sat	21	14.2	1	11	17	56	31	23	27	5		0	92	16	18	1	49	1	250
22	Sun	22	1.2	1	11	18	0	58	23	27	13		0	26	16	18	1	19	1	253
23	Mon	22	48.7	1	11	18	5	25	23	26	53		1	44	16	18	0	49	1	253
24	Tue	23	36.6	1	11	18	9	51	23	26	4		2	62	16	18	0	19	1	252
25	Wed	conjunc		1	11	18	14	18	23	24	47		3	80	16	18	0	11	1	250
26	Thu	0	24.5	1	11	18	18	44	23	23	2		4	97	16	18	0	41	1	246
27	Fri	1	11.9	1	11	18	23	11	23	20	49		6	15	16	18	1	10	1	240
28	Sat	1	58.5	1	11	18	27	37	23	18	7		7	32	16	18	1	40	1	233
29	Sun	2	44.2	1	11	18	32	3	23	14	58		8	48	16	18	2	10	1	224
30	Mon	3	28.9	1	11	18	36	29	23	11	20		9	65	16	18	2	39	1	213
31	Tue	4	13.1	1	11	18	40	54	23	7	15		10	81	16	18	3	8	1	202

* Mean Time may be found by subtracting 0^m.19 from the *Sidereal*.

† The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

BRISTOL CHANNEL LIGHTS AND TOWER FOR SHIPS' GUIDANCE.

NAMES OF PLACES.	LIGHTS, AND TOWER.	HOW SHOWN.	DISTANCE SEEN.	ELEVATION OF LIGHTS, WITH REMARKS.
TREVOSE HEAD	Two..	{ Upper, fixed .. Lower, " ..	.....	Upper, 204 feet, seen from South to E. $\frac{1}{2}$ S. Lower, 129 feet, seen from N. E. $\frac{1}{4}$ E. to S. W. $\frac{1}{4}$ W. Elevated 264 feet above the level of the sea.
PADSTOW	Tower	{ Upper, revolves .. Lower, fixed ..	8 leagues clear weath 30 miles	Upper, 528 ft. revolves in 2 m. and seen all round. Lower, 9 ft. from ground, increased in power.
LUNDY ISLAND	Two..	{ Upper, fixed .. Lower, " ..	28 miles	Upper, 86 ft. } Lower, 40 ft. } being 933 ft. asunder.
BIDEFORD	Two..	{ Upper, fixed .. Lower, " ..	15 miles	Shown from Michaelmas to Lady-day only. Shown during Tide Time.
ILFRACOMBE, Harb.	One..	Fixed, red .....	.....	Elevated 91 $\frac{1}{2}$ ft.; flashes in 3 $\frac{1}{2}$ m., and seen from N. b. W. to W. b. N.
MINEHEAD, Harbour	One..	Fixed .....	.....	Elevated 23 ft., seen from N. W. b. W. $\frac{1}{2}$ W. to W. b. N.
BURNHAM	Two..	{ Upper, flashes.. Lower, fixed ..	.....	Elevated 156 ft. above high water. Off the English Grounds.
FLATHOLM	One..	Revolving	16 miles	Elevated 73 ft.; visible 12 miles.
FLOAT. LIGHT VESS.	One..	Fixed, red	12 miles	Elevated 167 feet, } " 123 feet, } being 1000 feet asunder.
AVON, River	One..	{ Upper, fixed .. Lower, " ..	.....	Elevated 114 feet, } " 28 feet, } above high-water level.
NASH POINT	Two..	{ Upper, fixed .. Lower, " ..	.....	Elevated 38 feet; flashes in 20 seconds. Seen from sun-set to sun-rise, sides red, with, "Helwick" painted on them.
MUMBLES	One..	Fixed	15 miles	
SWANSEA, Harbour..	One..	Fixed, red	9 miles clear weath	
SCARWEATHER SAND	One..	Revolving, red ..	.....
LIGHT VESSEL	One..	Revolving .....	.....
PORHCRAWL Harbour	One..	Fixed .....	.....
CALDY ISLAND	One..	Fixed	19 miles	
ST. ANN'S POINT ..	Two..	{ Upper, fixed .. Lower, " ..	19 miles	Upper 192 feet, } Lower 159 feet, } above the level of the sea.
SMALLS	One..	Fixed, white	17 miles	Elevated 70 feet above high-water level.

TIDE TABLES.

EXPLANATION.

The Tides in this work are calculated for Greenwich Mean Time, and the Height for that Tide nearest mid-day at the following places:—

BARNSTAPLE.—*The Bar.*

BRIDGEWATER.—*The Bridge. The Time of high-water at Bridgewater Bar is about 40 minutes earlier. The depth of water at Cumbwitch Pill is 7 to 8 feet more than in the Tables.*

BRISTOL.—*Cumberland Gates. The height at Bathurst Gates is 9 feet 2 inches less than in the Tables.*

BRITON FERRY.—*Neath Bar. At Vale of Neath Railway Wharf, the depth is 8 inches less than in the Tables; at Giants Grave, 2 feet 6 inches less; Crown Works, and Neath Abbey 4 feet 6 inches less; Neath, 5 feet 6 inches less.*

CARDIFF.—*East Dock Sill. At the West Dock, the depth is 3 feet less than in the Tables; at the Glamorganshire Canal, 13 feet less.*

GLOUCESTER.—*Entrance to the Canal at Sharpness Point.*

ILFRACOMBE.—*Pier Head.*

LLANELLY.—*Dock Gates. At Burry Bar the depth of water is 8 feet more than in the Tables.*

NEWPORT.—*Dock Gates, which are about 40 feet above the bed of the river.*

MILFORD HAVEN.—*The heights are the rise above low-water at spring tides. The time at St. Ann's Lighthouse, is about 25 minutes earlier.*

SWANSEA.—*Entrance Channel. The depth of water at New Cut Bridge, is about 4 feet, and at Hafod Works 7 feet 6 inches less than in the Tables.*

PHASES OF THE MOON.

New Moon .. 6th, 12h. 29m. a.m. | Full Moon .. 20th, 7h. 35m. a.m.
 First Quarter. 13th, 4h. 33m. p.m. | Last Quarter. 27th, 2h. 47m. p.m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgewater.					Bristol.						
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height		
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.
1	Tuesday..	1	47	2	23	22	8	3	33	4	9	9	4	3	13	3	49	20
2	Wednesday	2	55	3	22	23	5	4	44	5	14	10	4	4	24	4	54	22
3	Thursday..	3	48	4	11	24	3	5	41	6	5	11	4	5	21	5	45	23
4	Friday ..	4	36	4	57	24	11	6	30	6	51	12	2	6	10	6	31	24
5	Saturday..	5	19	5	37	25	3	7	13	7	32	12	7	6	53	7	12	25
6	Sunday ..	5	56	6	11	25	9	7	52	8	8	13	3	7	32	7	48	26
7	Monday..	6	29	6	47	26	3	8	25	8	43	13	10	8	5	8	23	27
8	Tuesday..	7	3	7	21	26	4	8	59	9	16	18	11	8	39	8	56	27
9	Wednesday	7	39	7	57	26	3	9	34	9	50	13	10	9	14	9	30	27
10	Thursday..	8	16	8	36	26	0	10	7	10	25	13	6	9	47	10	5	26
11	Friday ..	8	53	9	11	25	6	10	40	10	57	12	11	10	20	10	37	25
12	Saturday..	9	32	9	53	24	11	11	14	11	33	12	2	10	54	11	13	24
13	Sunday ..	10	14	10	37	24	3	11	54	..	11	4	11	11	34	11	59	23
14	Monday..	11	3	11	32	23	6	0	19	0	49	10	5	..	0	29	22	
15	Tuesday..	..	0	0	8	23	4	1	21	2	0	10	2	1	1	1	40	22
16	Wednesday	0	50	1	34	23	10	2	40	3	21	10	10	2	20	3	1	22
17	Thursday..	2	14	2	51	25	0	4	0	4	40	12	3	3	40	4	20	25
18	Friday ..	3	27	3	59	26	4	5	19	5	52	13	11	4	59	5	32	27
19	Saturday..	4	32	5	1	27	6	6	26	6	55	15	5	6	6	6	35	29
20	Sunday ..	5	27	5	54	28	0	7	22	7	50	16	0	7	2	7	20	30
21	Monday..	6	18	6	43	28	6	8	14	8	39	16	8	7	54	8	19	31
22	Tuesday..	7	4	7	25	28	6	9	0	9	20	16	8	8	40	9	0	31
23	Wednesday	7	47	8	7	27	11	9	40	9	59	15	11	9	20	9	39	30
24	Thursday..	8	27	8	47	27	2	10	17	10	35	15	0	9	57	10	15	29
25	Friday ..	9	5	9	23	26	1	10	57	11	6	13	8	10	31	10	46	27
26	Saturday..	9	42	10	1	24	8	11	23	11	41	11	10	11	3	11	21	24
27	Sunday ..	10	20	10	40	23	6	12	0	..	10	5	11	11	40	..	22	
28	Monday..	11	2	11	30	22	2	0	22	0	48	8	9	0	2	0	28	19
29	Tuesday..	..	0	0	5	21	5	1	19	1	56	7	9	0	59	1	36	18
30	Wednesday	0	45	1	25	21	5	2	35	3	12	7	9	2	15	2	52	18
31	Thursday..	2	6	2	44	22	1	3	51	4	31	8	8	3	31	4	11	19

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m —Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 6th, 12h. 29m. a.m. | Full Moon .. 20th, 7h. 35m. a.m.
 First Quarter. 13th, 4h. 33m. p.m. | Last Quarter. 27th, 2h. 47m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.					Cardiff.					Gloucester.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H.	M.	H.	M.	F.	H.	M.	H.	M.	F.	H.	M.	H.	M.	F.
1	Tuesday..	2	22	2	58	15 10	3	5	3	41	22 9	3	58	4	34	18 11
2	Wednesday	3	30	3	57	16 10	4	16	4	46	23 11	5	9	5	39	20 5
3	Thursday..	4	23	4	46	17 10	5	13	5	37	25 2	6	6	6	30	21 11
4	Friday ..	5	11	5	32	18 8	6	2	6	23	26 3	6	55	7	16	23 4
5	Saturday..	5	54	6	12	19 1	6	45	7	4	26 9	7	38	7	57	23 11
6	Sunday ..	6	31	6	46	19 9	7	24	7	40	27 6	8	17	8	33	24 11
7	Monday..	7	4	7	22	20 4	7	57	8	15	28 4	8	50	9	8	25 11
8	Tuesday..	7	38	7	56	20 5	8	31	8	48	28 6	9	21	9	41	26 1
9	Wednesday	8	14	8	32	20 4	9	6	9	22	28 4	9	59	10	15	25 11
10	Thursday..	8	51	9	11	20 0	9	39	9	57	28 0	10	32	10	50	25 5
11	Friday ..	9	28	9	47	19 5	10	12	10	29	27 2	11	5	11	22	24 5
12	Saturday..	10	7	10	28	18 8	10	46	11	5	26 3	11	39	11	58	23 4
13	Sunday ..	10	49	11	12	17 10	11	26	11	51	25 2	..	0	19	21	11
14	Monday..	11	38	..	16	11	..	0	21	24 0	0	44	1	14	20	6
15	Tuesday..	0	7	0	43	16 8	0	53	1	32	23 9	1	46	2	25	20 3
16	Wednesday	1	25	2	9	17 4	2	12	2	53	24 6	3	5	3	46	21 2
17	Thursday..	2	49	3	26	18 9	3	32	4	12	26 5	4	25	5	5	23 6
18	Friday ..	4	2	4	34	20 5	4	51	5	24	28 6	5	44	6	17	26 1
19	Saturday..	5	7	5	36	21 11	5	58	6	27	30 4	6	51	7	20	28 5
20	Sunday ..	6	2	6	29	22 6	6	54	7	22	31 1	7	47	8	15	29 5
21	Monday..	6	53	7	18	23 2	7	46	8	11	31 9	8	39	9	4	30 3
22	Tuesday..	7	39	8	0	23 2	8	32	8	52	31 9	9	25	9	45	30 3
23	Wednesday	8	22	8	42	22 5	9	12	9	31	31 0	10	5	10	24	29 3
24	Thursday..	9	2	9	22	21 6	9	49	10	7	29 9	10	42	11	0	27 9
25	Friday ..	9	40	9	58	20 2	10	23	10	38	28 1	11	16	11	31	25 7
26	Saturday..	10	17	10	36	18 4	10	55	11	13	25 10	11	48	..	22	9
27	Sunday ..	10	55	11	15	16 11	11	32	11	54	24 0	0	6	0	25	20 6
28	Monday..	11	37	..	15	3	..	0	20	22 0	0	47	1	13	18	0
29	Tuesday..	0	5	0	40	14 3	0	51	1	28	20 9	1	44	2	21	16 5
30	Wednesday	1	20	2	0	14 3	2	7	2	44	20 9	3	0	3	37	16 5
31	Thursday..	2	41	3	19	15 2	3	23	4	3	21 10	4	16	4	56	17 9

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 6th, 12h 29m. a.m. | Full Moon .. 20th, 7h. 35m. a.m.
 First Quarter. 13th, 4h. 33m. p.m. | Last Quarter . 27th, 2h. 47m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.						Llanelly.						Milford Haven.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	H. M.	H. M.	F. I.	F. I.
1	Tuesday..	1 57	2 33	16	0			2 32	3 8	16	6			2 32	3 8	16			
2	Wednesday	3 5	3 32	16	10			3 40	4 7	17	4			3 40	4 7	16			
3	Thursday..	3 58	4 21	17	9			4 33	4 56	18	3			4 33	4 56	17			
4	Friday ..	4 46	5 7	18	6			5 21	5 42	19	0			5 21	5 42	18			
5	Saturday..	5 29	5 47	18	10			6 4	6 22	19	4			6 4	6 22	18			
6	Sunday ..	6 6	6 21	19	5			6 41	6 56	19	11			6 41	6 56	19			
7	Monday..	6 39	6 57	19	11			7 14	7 32	20	5			7 14	7 32	19			
8	Tuesday..	7 13	7 31	20	0			7 48	8 6	20	6			7 48	8 6	19			
9	Wednesday	7 49	8 7	19	11			8 24	8 42	20	5			8 24	8 42	19			
10	Thursday..	8 26	8 46	19	8			9 1	9 21	20	2			9 1	9 21	19			
11	Friday ..	9 3	9 22	19	1			9 38	9 57	19	7			9 38	9 57	19			
12	Saturday..	9 42	10 3	18	6			10 17	10 38	19	0			10 17	10 38	18			
13	Sunday ..	10 24	10 47	17	9			10 59	11 22	18	3			10 59	11 22	17			
14	Monday..	11 13	11 42	16	11			11 48	..	17	5			11 48	..	17			
15	Tuesday..	..	0 18	16	9			0 17	0 53	17	3			0 17	0 53	16			
16	Wednesday	1 0	1 44	17	4			1 35	2 19	17	10			1 35	2 19	17			
17	Thursday..	2 24	3 1	18	7			2 59	3 36	19	1			2 59	3 36	18			
18	Friday ..	3 37	4 9	20	0			4 12	4 44	20	6			4 12	4 44	19			
19	Saturday..	4 42	5 11	21	4			5 17	5 46	21	10			5 17	5 46	21			
20	Sunday ..	5 37	6 4	21	10			6 12	6 39	22	4			6 12	6 39	21			
21	Monday..	6 28	6 53	22	5			7 3	7 28	22	11			7 3	7 28	22			
22	Tuesday..	7 14	7 35	22	5			7 49	8 10	22	11			7 49	8 10	22			
23	Wednesday	7 57	8 17	21	9			8 32	8 52	22	3			8 32	8 52	21			
24	Thursday..	8 37	8 57	20	11			9 12	9 32	21	5			9 12	9 32	20			
25	Friday ..	9 15	9 33	19	9			9 50	10 8	20	3			9 50	10 8	19			
26	Saturday..	9 52	10 11	18	2			10 27	10 46	18	8			10 27	10 46	18			
27	Sunday ..	10 30	10 50	16	11			11 5	11 25	17	5			11 5	11 25	17			
28	Monday..	11 12	11 41	15	6			11 47	..	16	0			11 47	..	15			
29	Tuesday..	..	0 15	14	7			0 15	0 50	15	1			0 15	0 50	14			
30	Wednesday	0 55	1 35	14	7			1 30	2 10	15	1			1 30	2 10	14			
31	Thursday..	2 16	2 54	15	5			2 51	3 29	15	11			2 51	3 29	15			

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 6th, 12h. 29m. a.m. | Full Moon .. 20th, 7h. 35m. a.m.
 First Quarter 13th, 4h. 33m. p.m. | Last Quarter. 27th, 2h. 47m. p.m.

M. D.	W. D.	Newport.						Swansea.						Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Morn.		Even.	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.	H.	M.
1	Tu	3	13	3	49	21	2	2	22	2	58	16	10	8	3	8	33	10	41	11	14
2	Wd	4	24	4	54	22	7	3	30	3	57	17	10	9	2	9	25	11	46	..	..
3	Th	5	21	5	45	23	11	4	23	4	46	18	10	9	46	10	6	0	15	0	39
4	Fri	6	10	6	31	25	2	5	11	5	32	19	8	10	26	10	44	1	1	1	22
5	Sat	6	53	7	12	25	10	5	54	6	12	20	1	11	5	11	22	1	44	2	2
6	Sun	7	32	7	48	26	9	6	31	6	46	20	9	11	42	11	57	2	21	2	38
7	Mo	8	5	8	23	27	8	7	4	7	22	21	4	..	0	15	2	57	3	12	
8	Tu	8	39	8	56	27	10	7	38	7	56	21	5	0	33	0	50	3	29	3	46
9	Wd	9	14	9	30	27	8	8	14	8	32	21	4	1	8	1	26	4	2	4	20
10	Th	9	47	10	5	27	3	8	51	9	11	21	0	1	43	2	1	4	38	4	55
11	Fri	10	20	10	37	26	3	9	28	9	47	20	5	2	21	2	39	5	14	5	34
12	Sat	10	54	11	13	25	2	10	7	10	28	19	8	2	59	3	20	5	53	6	14
13	Sun	11	34	11	59	23	11	10	49	11	12	18	10	3	43	4	8	6	36	7	0
14	Mo	..	0	29	22	8	11	11	38	..	17	11	4	4	38	5	12	7	25	7	55
15	Tu	1	1	1	40	22	5	0	7	0	43	17	8	5	48	6	32	8	28	9	5
16	Wd	2	20	3	1	23	2	1	25	2	9	18	4	7	13	7	51	9	43	10	22
17	Th	3	40	4	20	25	4	2	49	3	26	19	9	8	26	8	59	11	2	11	38
18	Fri	4	59	5	32	27	10	4	2	4	34	21	5	9	29	9	55	..	0	12	
19	Sat	6	6	6	35	29	11	5	7	5	36	22	11	10	23	10	48	0	43	1	11
20	Sun	7	2	7	30	30	9	6	2	6	29	23	6	11	13	11	40	1	40	2	5
21	Mo	7	54	8	19	31	6	6	53	7	18	24	2	..	0	4	2	29	2	55	
22	Tu	8	40	9	0	31	6	7	39	8	0	24	2	0	29	0	51	3	18	3	42
23	Wd	9	20	9	39	30	8	8	22	8	42	23	5	1	12	1	36	4	3	4	24
24	Th	9	57	10	15	29	3	9	2	9	22	22	6	1	52	2	12	4	45	5	5
25	Fri	10	31	10	46	27	4	9	40	9	58	21	2	2	33	2	51	5	25	5	46
26	Sat	11	3	11	21	24	9	10	17	10	36	19	4	3	10	3	32	6	6	6	26
27	Sun	11	40	..	22	8	10	10	55	11	15	17	11	3	53	4	16	6	48	7	10
28	Mo	0	2	0	28	20	3	11	37	..	16	3	4	4	41	5	11	7	33	7	58
29	Tu	0	59	1	36	18	10	0	5	0	40	15	3	5	46	6	27	8	27	9	3
30	Wd	2	15	2	52	18	10	1	20	2	0	15	3	7	8	7	44	9	39	10	17
31	Th	3	31	4	11	20	1	2	41	3	19	16	2	8	19	8	52	10	54	11	31

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 4th, 6h. 15m. p.m. | Full Moon .. 18th, 7h. 40m. p.m.
 First Quarter. 12th, 1h. 40m. a.m. | Last Quarter.. 26th, 11h. 32m. a.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	3	15	3	44	23	3	5	6	5	37	10	1
2	Saturday.	4	8	4	32	24	4	6	1	6	26	11	5
3	Sunday ..	4	55	5	16	25	5	6	49	7	10	12	10
4	Monday..	5	36	5	54	25	10	7	31	7	50	13	4
5	Tuesday...	6	12	6	29	26	8	8	9	8	25	14	4
6	Wednesday	6	48	7	3	27	2	8	44	8	59	15	0
7	Thursday.	7	20	7	39	27	4	9	16	9	34	15	2
8	Friday ..	7	58	8	16	27	3	9	51	10	7	15	1
9	Saturday..	8	34	8	53	26	9	10	23	10	40	14	6
10	Sunday ..	9	12	9	32	26	0	10	57	11	14	13	6
11	Monday..	9	53	10	16	25	0	11	35	11	56	12	3
12	Tuesday..	10	39	11	7	23	10	..	0	22	10	10	..
13	Wednesday	11	42	..	..	23	1	0	53	1	31	9	11
14	Thursday.	0	21	1	8	23	2	2	13	2	56	10	0
15	Friday ..	1	57	2	39	24	2	3	42	4	26	11	3
16	Saturday..	3	16	3	50	25	8	5	7	5	43	13	1
17	Sunday ..	4	20	4	51	27	0	6	14	6	45	14	9
18	Monday..	5	18	5	41	27	7	7	12	7	36	15	6
19	Tuesday..	6	3	6	25	28	4	8	0	8	21	16	5
20	Wednesday	6	45	7	4	28	6	8	41	9	0	16	8
21	Thursday.	7	24	7	42	28	3	9	19	9	37	16	4
22	Friday ..	7	59	8	19	27	8	9	52	10	10	15	7
23	Saturday..	8	36	8	53	26	7	10	25	10	40	14	3
24	Sunday ..	9	7	9	24	25	3	10	52	11	7	12	7
25	Monday..	9	42	10	0	23	11	11	23	11	40	10	11
26	Tuesday..	10	20	10	43	22	6	12	0	..	9	2	11
27	Wednesday	11	10	11	43	21	3	0	27	0	57	7	6
28	Thursday.	..	0	21	20	10	10	1	32	2	13	7	0

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 4th, 6h. 15m. p.m.	Full Moon .. 18th, 7h. 40m. p.m.
First Quarter. 12th, 1h. 40m. a.m.	Last Quarter. 26th, 11h. 32m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.					Cardiff.					Gloucester.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	3	50	4	19	16	7	4	38	5	9	23	8	5	31	6	2	20	1
2	Saturday ..	4	43	5	7	17	11	5	33	5	58	25	3	6	26	6	51	22	1
3	Sunday ..	5	30	5	51	19	4	6	21	6	42	27	0	7	14	7	35	24	3
4	Monday ..	6	11	6	29	19	10	7	3	7	22	27	8	7	56	8	15	25	1
5	Tuesday ..	6	47	7	4	20	10	7	41	7	57	29	0	8	34	8	50	26	9
6	Wednesday	7	23	7	38	21	6	8	16	8	31	29	9	9	9	9	24	27	9
7	Thursday ..	7	55	8	14	21	8	8	48	9	6	30	0	9	41	9	59	28	1
8	Friday ..	8	33	8	51	21	7	9	23	9	39	29	11	10	16	10	32	27	11
9	Saturday ..	9	9	9	28	21	0	9	55	10	12	29	1	10	48	11	5	26	11
10	Sunday ..	9	47	10	7	20	0	10	29	10	46	28	0	11	22	11	39	25	5
11	Monday ..	10	28	10	51	18	9	11	5	11	28	26	5	11	58	..	..	23	6
12	Tuesday ..	11	14	11	42	17	4	11	54	..	..	24	6	0	21	0	47	21	2
13	Wednesday	..	..	0	17	16	5	0	25	1	3	23	5	1	18	1	56	19	9
14	Thursday ..	0	56	1	43	16	6	1	45	2	28	23	6	2	38	3	21	19	11
15	Friday ..	2	32	3	14	17	9	3	14	3	58	25	0	4	7	4	51	21	9
16	Saturday ..	3	51	4	25	19	7	4	39	5	15	27	5	5	32	6	8	24	9
17	Sunday ..	4	55	5	26	21	3	5	46	6	17	29	6	6	39	7	10	27	5
18	Monday ..	5	53	6	16	22	0	6	44	7	8	30	6	7	37	8	1	28	7
19	Tuesday ..	6	38	7	0	22	11	7	32	7	53	31	6	8	25	8	46	29	11
20	Wednesday	7	20	7	39	23	2	8	13	8	32	31	9	9	6	9	25	30	3
21	Thursday ..	7	59	8	17	22	10	8	51	9	9	31	5	9	44	10	2	29	9
22	Friday ..	8	34	8	54	22	1	9	24	9	42	30	7	10	17	10	35	28	9
23	Saturday ..	9	11	9	28	20	9	9	57	10	12	28	11	10	50	11	5	26	7
24	Sunday ..	9	42	9	59	19	1	10	24	10	39	26	9	11	17	11	32	23	11
25	Monday ..	10	17	10	35	17	5	10	55	11	12	24	8	11	48	..	..	21	4
26	Tuesday ..	10	55	11	18	15	8	11	32	11	59	22	6	0	5	0	25	18	9
27	Wednesday	11	45	..	..	14	0	..	..	0	29	20	6	0	52	1	22	16	1
28	Thursday ..	0	18	0	56	13	6	1	4	1	45	19	10	1	57	2	28	15	3

The above are in Greenwich Mean Time, if local Time be required for Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10 m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 4th, 6h. 15m. p.m. | Full Moon .. 18th, 7h. 40m. p.m.
 First Quarter. 12th, 1h. 40m. a.m. | Last Quarter. 26th, 11h. 32m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.					Llanelly.					Milford Haven.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	3	25	3	54	16	8	4	0	4	29	17	2	4	0	4	29	16	9
2	Saturday..	4	18	4	42	17	10	4	53	5	17	18	4	4	53	5	17	17	10
3	Sunday ..	5	5	5	26	19	0	5	40	6	1	19	6	5	40	6	1	18	11
4	Monday..	5	46	6	4	19	6	6	21	6	39	20	0	6	21	6	39	19	4
5	Tuesday ..	6	22	6	39	20	4	6	57	7	14	20	10	6	57	7	14	20	2
6	Wednesdy	6	58	7	13	20	11	7	33	7	48	21	5	7	33	7	48	20	8
7	Thursday.	7	30	7	49	21	1	8	5	8	24	21	7	8	5	8	24	20	10
8	Friday ..	8	8	8	26	21	0	8	43	9	1	21	6	8	43	9	1	20	9
9	Saturday .	8	44	9	3	20	6	9	19	9	38	21	0	9	19	9	38	20	3
10	Sunday ..	9	22	9	42	19	8	9	57	10	17	20	2	9	57	10	17	19	6
11	Monday..	10	3	10	26	18	7	10	38	11	1	19	1	10	38	11	1	18	6
12	Tuesday ..	10	50	11	17	17	4	11	24	11	52	17	10	11	24	11	52	17	4
13	Wednesdy	11	52	..	..	16	6	..	..	0	27	17	0	..	..	0	27	16	7
14	Thursday.	0	31	1	18	16	7	1	6	1	53	17	1	1	6	1	53	16	8
15	Friday ..	2	7	2	49	17	8	2	42	3	24	18	2	2	42	3	24	17	8
16	Saturday..	3	26	4	0	19	3	4	1	4	35	19	9	4	1	4	35	19	2
17	Sunday ..	4	30	5	1	20	9	5	5	5	36	21	3	5	5	5	36	20	6
18	Monday..	5	28	5	51	21	5	6	3	6	26	21	11	6	3	6	26	21	1
19	Tuesday..	6	13	6	35	22	2	6	48	7	10	22	8	6	48	7	10	21	10
20	Wednesdy	6	55	7	14	22	5	7	30	7	49	22	11	7	30	7	49	22	0
21	Thursday.	7	34	7	52	22	1	8	9	8	27	22	7	8	9	8	27	21	9
22	Friday ..	8	9	8	29	21	6	8	44	9	4	22	0	8	44	9	4	21	2
23	Saturday..	8	46	9	3	20	3	9	21	9	38	20	9	9	21	9	38	20	1
24	Sunday ..	9	17	9	34	18	10	9	52	10	9	19	4	9	52	10	9	18	9
25	Monday..	9	52	10	10	17	5	10	27	10	45	17	11	10	27	10	45	17	5
26	Tuesday..	10	30	10	53	15	10	11	5	11	28	16	4	11	5	11	28	16	0
27	Wednesdy	11	20	11	53	14	5	11	55	..	14	11	..	11	55	..	14	9	9
28	Thursday.	..	..	0	31	13	11	0	28	1	6	14	5	0	28	1	6	14	4

The above are in Greenwich Mean Time, if local Time be required for
 Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 4th, 6h. 15m. p.m. | Full Moon .. 18th, 7h. 40m. p.m.
 First Quarter. 12th, 1h. 40m. a.m. | Last Quarter. 26th, 11h. 32m. a.m.

W. D.	Newport.					Swansea.					Liverpool.				London.					
	Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.	Morn.		Even.				
	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.		
Fri	4	46	5	17	22	3	3	50	4	19	17	7	9	19	9	43	..	0	5	
Sat	5	41	6	6	24	0	4	43	5	7	18	11	10	3	10	23	0	33	0	58
Sun	6	29	6	50	26	1	5	30	5	51	20	4	10	42	11	2	1	19	1	40
Mo	7	11	7	30	26	11	6	11	6	29	20	10	11	21	11	40	2	0	2	18
Tu	7	49	8	5	28	4	6	47	7	4	21	10	11	58	..		2	37	2	55
Wd	8	24	8	39	29	3	7	23	7	38	22	6	0	15	0	34	3	13	3	29
Th	8	56	9	14	29	7	7	55	8	14	22	8	0	50	1	7	3	47	4	2
Fri	9	31	9	47	29	5	8	33	8	51	22	7	1	26	1	44	4	19	4	38
Sat	10	3	10	20	28	5	9	9	9	28	22	0	2	1	2	19	4	56	5	14
Sun	10	37	10	54	27	3	9	47	10	7	21	0	2	38	2	59	5	32	5	52
Mo	11	13	11	36	25	4	10	28	10	51	19	9	3	20	3	43	6	14	6	36
Tu	..		0	2	23	2	11	14	11	42	18	4	4	11	4	41	7	0	7	28
Wd	0	33	1	11	22	0	..		0	17	17	5	5	17	5	59	7	58	8	33
Th	1	53	2	36	22	1	0	56	1	43	17	6	6	46	7	29	9	15	9	56
Fri	3	22	4	6	23	9	2	32	3	14	18	9	8	11	8	48	10	38	11	23
Sat	4	47	5	23	26	7	3	51	4	25	20	7	9	20	9	48	..	0	1	
Sun	5	54	6	25	28	11	4	55	5	26	22	3	10	13	10	39	0	34	1	4
Mo	6	52	7	16	30	1	5	53	6	16	23	0	11	4	11	26	1	30	1	57
Tu	7	40	8	1	31	3	6	38	7	0	23	11	11	49	..		2	20	2	42
Wd	8	21	8	40	31	6	7	20	7	39	24	2	0	11	0	31	3	4	3	25
Th	8	59	9	17	31	2	7	59	8	17	23	10	0	51	1	11	3	44	4	3
Fri	9	32	9	50	30	2	8	34	8	54	23	1	1	29	1	45	4	23	4	41
Sat	10	5	10	20	28	3	9	11	9	28	21	9	2	4	2	21	4	57	5	17
Sun	10	32	10	47	25	10	9	42	9	59	20	1	2	38	2	53	5	34	5	52
Mo	11	3	11	20	23	4	10	17	10	35	18	5	3	11	3	32	6	8	6	27
Tu	11	40	..		20	11	10	55	11	18	16	8	3	52	4	16	6	48	7	9
Wd	0	7	0	37	18	7	11	45	..		15	0	4	47	5	21	7	33	8	3
Th	1	12	1	53	17	9	0	18	0	56	14	6	6	0	6	46	8	37	9	16

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

D

PHASES OF THE MOON.

New Moon .. 6th, 9h. 38m. a.m. | Full Moon .. 20th, 8h. 55m. a.m.
 First Quarter. 13th, 8h. 47m. a.m. | Last Quarter. 28th, 7h. 45m. a.m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgewater.					Bristol.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H. M.	H. M.	F. I.	F. I.		H. M.	H. M.	F. I.	F. I.		H. M.	H. M.	F. I.	F. I.	
1	Friday ..	1 5	1 50	21	3		2 53	3 36	7	6		2 33	3 16	18	2	
2	Saturday.	2 30	3 6	22	6		4 17	4 56	9	2		3 57	4 36	20	6	
4	Sunday ..	3 36	4 1	24	0		5 29	5 55	11	0		5 9	5 35	23	3	
3	Monday..	4 23	4 48	25	6		6 18	6 42	12	11		5 58	6 22	25	11	
5	Tuesday...	5 10	5 29	26	1		7 4	7 23	13	8		6 44	7 3	27	0	
6	Wednesdy	5 48	6 4	27	2		7 44	8 1	15	0		7 24	7 41	29	0	
7	Thursady.	6 21	6 40	28	0		8 17	8 36	16	0		7 57	8 16	30	6	
8	Friday ..	6 58	7 17	28	4		8 54	9 13	16	5		8 34	8 53	31	0	
9	Saturday..	7 36	7 56	28	2		9 31	9 49	16	3		9 11	9 29	30	10	
10	Sunday ..	8 15	8 36	27	8		10 6	10 25	15	7		9 46	10 5	29	11	
11	Monday..	8 56	9 17	26	8		10 43	11 1	14	4		10 23	10 41	28	1	
12	Tuesday..	9 39	10 2	25	5		11 21	11 42	12	10		11 0	11 22	25	9	
13	Wednesday	10 26	10 52	23	11		..	0 6	10	11		11 46	..	23	0	
14	Thursday.	11 26	..	22	10		0 37	1 15	9	7		0 17	0 55	21	1	
15	Friday ..	0 9	0 57	22	9		2 1	2 46	9	6		1 41	2 26	20	11	
16	Saturday..	1 45	2 29	23	8		3 31	4 16	10	7		3 11	3 56	22	7	
17	Sunday ..	3 5	3 35	25	2		4 55	5 27	12	6		4 35	5 7	25	4	
18	Monday..	4 4	4 33	26	6		5 58	6 27	14	2		5 38	6 7	27	10	
19	Tuesday..	4 59	5 23	27	6		6 54	7 18	15	5		6 34	6 58	29	8	
20	Wednesday	5 44	6 1	27	11		7 39	7 58	15	11		7 19	7 38	30	5	
21	Thursday.	6 20	6 39	28	2		8 16	8 35	16	3		7 56	8 15	30	10	
22	Friday ..	6 56	7 14	28	1		8 52	9 10	16	2		8 32	8 50	30	8	
23	Saturday..	7 31	7 49	27	5		9 26	9 42	15	3		9 6	9 22	29	6	
24	Sunday ..	8 5	8 22	26	7		9 57	10 13	14	3		9 37	9 53	28	0	
25	Monday..	8 38	8 53	25	5		10 27	10 40	12	10		10 7	10 20	25	9	
26	Tuesday..	9 11	9 28	24	0		10 56	11 11	11	0		10 36	10 51	23	3	
27	Wednesday	9 47	10 8	22	10		11 28	11 48	9	7		11 8	11 28	21	1	
28	Thursday.	10 31	11 0	21	6		..	0 12	7	10		11 52	..	18	7	
29	Friday ..	11 32	..	20	10		0 45	1 21	7	0		0 25	1 1	17	4	
30	Saturday.	0 11	0 54	21	0		2 3	2 43	7	2		1 48	2 23	17	8	
31	Sunday ..	1 37	2 16	22	2		3 24	4 2	8	9		3 4	3 42	19	11	

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m — Bridgewater, *sub.* 12m. — Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 6th, 9h. 38m. a.m. | Full Moon .. 20th, 8h. 55m. a.m.
 First Quarter. 13th, 8h. 47m. a.m. | Last Quarter . 28th, 7h. 45m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn		Even		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	1	40	2	25	14	0	2	25	3	8	20	6
2	Saturday ..	3	5	3	41	15	8	3	49	4	28	22	6
3	Sunday ..	4	11	4	36	17	6	5	1	5	27	24	10
4	Monday..	4	58	5	23	19	5	5	50	6	14	27	2
5	Tuesday..	5	45	6	4	20	2	6	36	6	55	28	1
6	Wednesday	6	23	6	39	21	6	7	16	7	33	29	9
7	Thursday.	6	56	7	15	22	6	7	49	8	8	31	1
8	Friday ..	7	33	7	52	22	11	8	26	8	45	31	6
9	Saturday ..	8	11	8	31	22	9	9	3	9	21	31	4
10	Sunday ..	8	50	9	11	22	1	9	38	9	57	30	7
11	Monday..	9	31	9	52	20	10	10	15	10	33	29	0
12	Tuesday..	10	14	10	37	19	4	10	52	11	14	27	0
13	Wednesday	11	1	11	27	17	5	11	38	..	..	24	8
14	Thursday.	..	..	0	1	16	1	0	9	0	47	23	0
15	Friday ..	0	44	1	32	16	0	1	33	2	18	22	10
16	Saturday..	2	20	3	4	17	1	3	3	3	48	24	3
17	Sunday ..	3	40	4	10	19	0	4	27	4	58	26	7
18	Monday..	4	39	5	8	20	8	5	30	6	0	28	9
19	Tuesday..	5	34	5	58	21	11	6	26	6	50	30	4
20	Wednesday	6	19	6	36	22	5	7	11	7	30	31	0
21	Thursday.	6	55	7	14	22	9	7	48	8	7	31	4
22	Friday ..	7	31	7	49	22	8	8	24	8	42	31	3
23	Saturday..	8	6	8	24	21	10	8	58	9	14	30	2
24	Sunday ..	8	40	8	57	20	9	9	29	9	45	28	11
25	Monday..	9	13	9	28	19	4	9	59	10	12	27	0
26	Tuesday..	9	46	10	3	17	6	10	28	10	43	24	10
27	Wednesday	10	22	10	43	16	1	11	0	11	20	23	0
28	Thursday.	11	6	11	35	14	4	11	44	..	..	20	10
29	Friday ..	..	..	0	7	13	6	0	17	0	53	19	10
30	Saturday..	0	46	1	29	13	8	1	35	2	15	20	1
31	Sunday ..	2	12	2	51	15	3	2	56	3	34	22	0

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 6th, 9h. 38m. a.m. | Full Moon .. 20th, 8h. 56m. a.m.
 First Quarter. 13th, 8h. 47m. a.m. | Last Quarter . 28th, 7h. 45m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.						Llanelly.						Milford Haven.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	1	15	2	0	14	5	1	50	2	35	14	11	1	50	2	35	14	11
2	Saturday..	2	40	3	16	15	10	3	15	3	51	16	4	3	15	3	51	16	4
3	Sunday ..	3	46	4	11	17	6	4	21	4	46	18	0	4	21	4	46	17	0
4	Monday..	4	33	4	58	19	1	5	8	5	33	19	7	5	8	5	33	19	7
5	Tuesday..	5	20	5	39	19	9	5	55	6	14	20	3	5	55	6	14	19	3
6	Wednesdy	5	58	6	14	20	11	6	33	6	49	21	5	6	33	6	49	20	5
7	Thursday.	6	31	6	50	21	10	7	6	7	25	22	4	7	6	7	25	21	4
8	Friday ..	7	8	7	27	22	2	7	43	8	2	22	8	7	43	8	2	21	8
9	Saturday .	7	46	8	6	22	0	8	21	8	41	22	6	8	21	8	41	21	6
10	Sunday ..	8	25	8	46	21	6	9	0	9	21	22	0	9	0	9	21	21	0
11	Monday..	9	6	9	27	20	4	9	41	10	2	20	10	9	41	10	2	20	10
12	Tuesday..	9	49	10	12	19	0	10	24	10	47	19	6	10	24	10	47	18	6
13	Wednesday	10	36	11	3	17	5	11	11	11	37	17	11	11	11	11	37	17	11
14	Thursday.	11	37	..	..	16	2	..	..	0	11	16	8	..	..	0	11	16	8
15	Friday ..	0	19	1	7	16	1	0	54	1	42	16	7	0	54	1	42	16	7
16	Saturday..	1	55	2	39	17	1	2	30	3	14	17	7	2	30	3	14	17	7
17	Sunday ..	3	15	3	45	18	9	3	50	4	20	19	3	3	50	4	20	18	3
18	Monday..	4	14	4	43	20	2	4	49	5	18	20	8	4	49	5	18	20	8
19	Tuesday..	5	9	5	33	21	4	5	44	6	8	21	10	5	44	6	8	21	10
20	Wednesday	5	54	6	11	21	9	6	29	6	46	22	3	6	29	6	46	21	3
21	Thursday.	6	30	6	49	22	0	7	5	7	24	22	6	7	5	7	24	21	6
22	Friday ..	7	6	7	24	21	11	7	41	7	59	22	5	7	41	7	59	21	5
23	Saturday..	7	41	7	59	21	3	8	16	8	34	21	9	8	16	8	34	20	9
24	Sunday ..	8	15	8	32	20	3	8	50	9	7	20	9	8	50	9	7	20	9
25	Monday..	8	48	9	3	19	0	9	23	9	38	19	6	9	23	9	38	18	6
26	Tuesday..	9	21	9	38	17	6	9	56	10	13	18	0	9	56	10	13	17	0
27	Wednesday	9	57	10	18	16	2	10	32	10	53	16	8	10	32	10	53	16	8
28	Thursday.	10	41	11	10	14	8	11	16	11	45	15	2	11	16	11	45	15	2
29	Friday ..	11	42	..	..	13	11	..	..	0	17	14	5	..	..	0	17	14	4
30	Saturday..	0	21	1	4	14	1	0	56	1	39	14	7	0	56	1	39	14	6
31	Sunday ..	1	47	2	26	15	6	2	22	3	1	16	0	2	22	3	1	15	0

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Moon .. 6th, 9h. 38m. a.m. | Full Moon .. 20th, 8h. 55m. a.m.
 Quarter. 13th, 8h. 47m. a.m. | Last Quarter . 28th, 7h. 45m. a.m.

Newport.				Swansea.				Liverpool.		London.			
Morn.		Even.		Height		Morn.		Even.		Morn.		Even.	
H. M.	H. M.	F.	I.	H. M.	H. M.	F.	I.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
2 33	3 16	18	7	1 40	2 25	15	0	7 26	8 5	9 56	10 35		
3 57	4 36	20	11	3 5	3 41	16	8	8 40	9 11	11 17	11 53		
5 9	5 35	23	6	4 11	4 36	18	6	9 36	9 57	..	0 25		
5 58	6 22	26	3	4 58	5 23	20	5	10 16	10 36	0 51	1 13		
6 44	7 3	27	4	5 45	6 4	21	2	10 56	11 14	1 33	1 54		
7 24	7 41	29	3	6 23	6 59	22	6	11 33	11 50	2 13	2 30		
7 57	8 16	30	9	6 56	7 15	23	6	..	0 7	2 49	3 5		
8 34	8 53	31	3	7 33	7 52	23	11	0 26	0 44	3 21	3 39		
9 11	9 29	31	1	8 11	8 31	23	9	1 4	1 23	3 57	4 16		
9 46	10 5	30	2	8 50	9 11	23	1	1 42	2 0	4 35	4 54		
10 23	10 41	28	4	9 31	9 52	21	10	2 21	2 42	5 13	5 34		
11 0	11 22	26	1	10 14	10 37	20	4	3 4	3 28	5 56	6 19		
11 46	..	23	4	11 1	11 27	18	5	3 54	4 23	6 44	7 11		
0 17	0 55	21	6	..	0 1	17	1	4 59	5 41	7 40	8 15		
1 41	2 26	21	4	0 44	1 32	17	0	6 33	7 19	8 58	9 44		
3 11	3 56	22	11	2 20	3 4	18	1	8 1	8 39	10 28	11 12		
4 35	5 7	25	8	3 40	4 10	20	0	9 10	9 35	11 52	..		
5 38	6 7	28	1	4 39	5 8	21	8	10 0	10 24	0 24	0 50		
6 34	6 58	29	11	5 34	5 58	22	11	10 47	11 9	1 16	1 41		
7 19	7 38	30	8	6 19	6 36	23	5	11 29	11 47	2 4	2 25		
7 56	8 15	31	1	6 55	7 14	23	9	..	0 6	2 45	3 2		
8 32	8 50	30	11	7 31	7 49	23	8	0 25	0 42	3 20	3 38		
9 6	9 22	29	9	8 6	8 24	22	10	1 1	1 18	3 55	4 13		
9 37	9 53	28	3	8 40	8 57	21	9	1 35	1 51	4 30	4 47		
10 7	10 20	26	1	9 13	9 28	20	4	2 7	2 23	5 3	5 20		
10 36	10 51	23	6	9 46	10 3	18	6	2 39	2 58	5 36	5 53		
11 8	11 28	21	6	10 22	10 43	17	1	3 16	3 37	6 13	6 32		
11 52	..	19	0	11 6	11 35	15	4	4 1	4 30	6 54	7 18		
0 25	1 1	17	9	..	0 7	14	6	5 8	5 48	7 47	8 24		
1 43	2 23	18	1	0 46	1 29	14	8	6 35	7 16	9 5	9 46		
3 4	3 42	20	3	2 12	2 51	16	3	7 54	8 28	10 25	11 5		

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 4th, 10h. 3m. p.m. | Full Moon .. 18th, 11h. 6m. p.m.
 First Quarter 11th, 3h. 9m. p.m. | Last Quarter. 27th, 2h. 0m. a.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Monday..	2	51	3	19	23	9	4	40	5	11	10	9
2	Tuesday..	3	44	4	8	25	5	5	37	6	1	12	10
3	Wednesday	4	30	4	54	26	11	6	24	6	48	14	8
4	Thursday..	5	15	5	33	27	6	7	9	7	27	15	5
5	Friday ..	5	53	6	12	28	4	7	49	8	9	16	5
6	Saturday..	6	32	6	53	28	10	8	28	8	49	17	1
7	Sunday ..	7	14	7	35	28	8	9	10	9	30	16	10
8	Monday..	7	56	8	19	28	1	9	49	10	10	16	2
9	Tuesday..	8	42	9	3	27	0	10	30	10	49	14	9
10	Wednesday	9	25	9	53	25	7	11	8	11	34	13	0
11	Thursday..	10	20	10	48	24	0	12	0	..	11	0	11
12	Friday ..	11	22	..	22	10		0	32	1	10	9	7
13	Saturday..	0	0	0	44	23	2	1	51	2	34	10	0
14	Sunday ..	1	30	2	10	23	6	3	16	3	56	10	5
15	Monday..	2	47	3	16	24	10	4	34	5	9	12	1
16	Tuesday..	3	45	4	11	26	0	5	39	6	5	13	6
17	Wednesday	4	34	4	56	26	10	6	28	6	50	14	7
18	Thursday..	5	16	5	36	27	2	7	10	7	31	15	0
19	Friday ..	5	53	6	11	27	5	7	49	8	8	15	3
20	Saturday..	6	28	6	47	27	5	8	24	8	43	15	3
21	Sunday ..	7	3	7	20	26	11	8	59	9	16	14	8
22	Monday..	7	35	7	52	26	3	9	30	9	45	13	10
23	Tuesday..	8	10	8	26	25	4	10	2	10	16	12	8
24	Wednesday	8	45	9	3	24	3	10	33	10	49	11	4
25	Thursday..	9	23	9	43	23	2	11	6	11	24	10	0
26	Friday ..	10	5	10	29	22	2	11	45	..	8	9	11
27	Saturday..	10	57	11	27	21	4	0	9	0	42	7	7
28	Sunday ..	..	0	0	2	21	5	1	16	1	53	7	9
29	Monday..	0	42	1	22	22	3	2	32	3	9	8	10
30	Tuesday..	1	58	2	31	23	8	3	43	4	18	10	7

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 4th, 10h. 3m. p.m. | Full Moon .. 18th, 11h. 6m. p.m.
 First Quarter. 11th, 3h. 9m. p.m. | Last Quarter.. 27th, 2h. 0m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Monday..	3	26	3	54	17	3	4	12	4	43	24	5
2	Tuesday..	4	19	4	43	19	4	5	9	5	33	27	0
3	Wednesday	5	5	5	29	21	2	5	56	6	20	29	5
4	Thursday..	5	50	6	8	21	11	6	41	6	59	30	4
5	Friday ..	6	28	6	47	22	11	7	21	7	41	31	6
6	Saturday..	7	7	7	28	23	7	8	0	8	21	32	4
7	Sunday ..	7	49	8	10	23	4	8	42	9	2	32	0
8	Monday..	8	31	8	54	22	8	9	21	9	42	31	3
9	Tuesday..	9	17	9	38	21	3	10	2	10	21	29	6
10	Wednesday	10	0	10	28	19	6	10	40	11	6	27	3
11	Thursday	10	55	11	23	17	6	11	32	..	24	10	..
12	Friday ..	11	57	..	16	1	1	0	4	0	42	23	0
13	Saturday..	0	35	1	19	16	6	1	23	2	6	23	6
14	Sunday ..	2	5	2	45	16	11	2	48	3	28	24	0
15	Monday..	3	22	3	51	18	7	4	6	4	41	26	1
16	Tuesday..	4	20	4	46	20	0	5	10	5	37	28	0
17	Wednesday	5	9	5	31	21	1	6	0	6	22	29	3
18	Thursday..	5	51	6	11	21	6	6	42	7	3	29	9
19	Friday ..	6	28	6	46	21	10	7	21	7	40	30	2
20	Saturday..	7	3	7	22	21	10	7	56	8	15	30	2
21	Sunday ..	7	38	7	55	21	2	8	31	8	48	29	5
22	Monday..	8	10	8	27	20	4	9	2	9	17	28	4
23	Tuesday..	8	45	9	1	19	2	9	34	9	48	26	11
24	Wednesday	9	20	9	38	17	10	10	5	10	21	25	2
25	Thursday..	9	58	10	18	16	6	10	38	10	56	23	6
26	Friday ..	10	40	11	4	15	3	11	17	11	41	22	0
27	Saturday..	11	32	..	14	1	1	..	0	14	20	7	0
28	Sunday ..	0	2	0	37	14	3	0	48	1	25	20	9
29	Monday..	1	17	1	57	15	4	2	4	2	41	22	1
30	Tuesday..	2	33	3	6	17	1	3	15	3	50	24	3

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 4th, 10h. 3m. p.m. | Full Moon .. 18th, 11h. 6m. p.m.
 First Quarter. 11th, 3h. 9m. p.m. | Last Quarter. 27th, 2h. 0m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.						Llanelly.						Milford Haven.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Monday..	3	1	3	29	17	3	3	36	4	4	17	9	3	36	4	4	17	3
2	Tuesday..	3	54	4	18	19	0	4	29	4	53	19	6	4	29	4	53	18	11
3	Wednesday	4	40	5	4	20	8	5	15	5	39	21	2	5	15	5	39	20	5
4	Thursday..	5	25	5	43	21	4	6	0	6	18	21	10	6	0	6	18	21	0
5	Friday ..	6	3	6	22	22	2	6	38	6	57	22	8	6	38	6	57	21	10
6	Saturday..	6	42	7	3	22	9	7	17	7	38	23	3	7	17	7	38	22	4
7	Sunday ..	7	24	7	45	22	7	7	59	8	20	33	1	7	59	8	20	22	2
8	Monday..	8	6	8	29	21	11	8	41	9	4	22	5	8	41	9	4	21	7
9	Tuesday..	8	52	9	13	20	9	9	27	9	48	21	3	9	27	9	48	20	6
10	Wednesday	9	36	10	3	19	2	10	10	10	38	19	8	10	10	10	38	19	1
11	Thursday..	10	30	10	58	17	6	11	5	11	33	18	0	11	5	11	33	17	6
12	Friday ..	11	32	..	..	16	2	..	..	0	7	16	8	..	..	0	7	16	4
13	Saturday..	0	10	0	54	16	7	0	45	1	29	17	1	0	45	1	29	16	8
14	Sunday ..	1	40	2	20	16	11	2	15	2	55	17	5	2	15	2	55	17	0
15	Monday..	2	56	3	27	18	5	3	32	4	1	18	11	3	32	4	1	18	4
16	Tuesday..	3	55	4	21	19	8	4	30	4	56	20	2	4	30	4	56	19	6
17	Wednesday	4	44	5	6	20	7	5	19	5	41	21	1	5	19	5	41	20	4
18	Thursday..	5	26	5	46	20	11	6	1	6	21	21	5	6	1	6	21	20	8
19	Friday ..	6	3	6	21	21	3	6	38	6	56	21	9	6	38	6	56	20	11
20	Saturday..	6	38	6	57	21	3	7	13	7	32	21	9	7	13	7	32	20	11
21	Sunday ..	7	13	7	30	20	8	7	48	8	5	21	2	7	48	8	5	20	5
22	Monday..	7	45	8	2	19	11	8	20	8	37	20	5	8	20	8	37	19	9
23	Tuesday..	8	20	8	36	18	11	8	55	9	11	19	5	8	55	9	11	18	10
24	Wednesday	8	56	9	13	17	9	9	30	9	48	18	3	9	30	9	48	17	9
25	Thursday..	9	33	9	53	16	7	10	8	10	28	17	1	10	8	10	28	16	8
26	Friday ..	10	15	10	39	15	6	10	50	11	14	16	0	10	50	11	14	15	8
27	Saturday..	11	7	11	37	14	6	11	42	..	..	15	0	11	42	..	..	14	10
28	Sunday ..	..	..	0	12	14	7	0	12	0	47	15	1	0	12	0	47	14	11
29	Monday ..	0	52	1	32	15	7	1	27	2	7	16	1	1	27	2	7	15	9
30	Tuesday..	2	8	2	41	17	1	2	43	3	16	17	7	2	43	3	16	17	2

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

1st Moon .. 4th, 10h. 3m. p.m. | Full Moon .. 18th, 11h. 6m. p.m.
 1st Quarter 11th, 3h. 9m. p.m. | Last Quarter. 27th, 2h. 0m. a.m.

W. D.	Newport.					Swansea.					Liverpool.				London.			
	Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.	
	H. M.	H. M.	H. M.	F. I.		H. M.	H. M.	H. M.	F. I.		H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	
Mo	4 20	4 51	23	1		3 26	3 54	18	3		8 59	9 23	11 40	..				
Tu	5 17	5 41	26	1		4 19	4 43	20	4		9 43	10 3	0 12	0 37				
Wd	6 4	6 28	28	9		5 5	5 29	22	2		10 22	10 41	0 58	1 19				
Th	6 49	7 7	29	11		5 50	6 8	22	11		11 1	11 18	1 39	1 59				
Fri	7 29	7 49	31	3		6 28	6 47	23	11		11 39	11 58	2 17	2 34				
Sat	8 8	8 29	32	3		7 7	7 28	24	7		..	0 18	2 54	3 13				
Sun	8 50	9 10	31	10		7 49	8 10	24	4		0 39	1 1	3 32	3 52				
Mo	9 29	9 50	30	11		8 31	8 54	23	8		1 22	1 42	4 13	4 34				
Tu	10 10	10 29	28	11		9 17	9 38	22	3		2 4	2 27	4 54	5 17				
Wd	10 48	11 14	26	5		10 0	10 28	20	6		2 49	3 13	5 40	6 4				
Th	11 40	..	23	6		10 55	11 23	18	6		3 44	4 16	6 29	7 1				
Fri	0 12	0 50	21	6		11 57	..	17	1		4 53	5 35	7 33	8 9				
Sat	1 31	2 14	22	1		0 35	1 19	17	6		6 21	7 7	8 52	9 34				
Sun	2 56	3 36	22	8		2 5	2 45	17	11		7 48	8 23	10 16	10 58				
Mo	4 14	4 49	25	0		3 22	3 51	19	7		8 54	9 21	11 35	..				
Tu	5 18	5 45	27	3		4 20	4 46	21	0		9 44	10 6	0 7	0 35				
Wd	6 8	6 30	28	7		5 9	5 31	22	1		10 25	10 43	0 59	1 22				
Th	6 50	7 11	29	3		5 51	6 11	22	6		11 2	11 21	1 42	2 1				
Fri	7 29	7 48	29	9		6 28	6 46	22	10		11 39	11 57	2 18	2 37				
Sat	8 4	8 23	29	9		7 3	7 22	22	10		..	0 14	2 54	3 12				
Sun	8 39	8 56	28	9		7 38	7 55	22	2		0 33	0 50	3 28	3 46				
Mo	9 10	9 25	27	8		8 10	8 27	21	4		1 7	1 22	4 2	4 19				
Tu	9 42	9 56	26	0		8 45	9 120	2			1 38	1 55	4 34	4 50				
Wd	10 13	10 29	23	11		9 20	9 38	18	10		2 11	2 31	5 8	5 24				
Th	10 46	11 4	22	1		9 58	10 18	17	6		2 49	3 10	5 44	6 4				
Fri	11 25	11 49	20	3		10 40	11 4	16	3		3 33	3 58	6 26	6 49				
Sat	..	0 22	18	8		11 32	..	15	1		4 27	5 4	7 15	7 44				
Sun	0 56	1 33	18	10		0 2	0 37	15	3		5 42	6 23	8 20	8 59				
Mo	2 12	2 49	20	5		1 17	1 57	16	4		7 4	7 41	9 36	10 14				
Tu	3 23	3 58	22	11		2 33	3 6	18	1		8 12	8 41	10 51	11 24				

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 4th, 7h. 40m. a.m. | Full Moon .. 18th, 1h. 52m. p.m.
 First Quarter. 10th, 10h. 4m. p.m. | Last Quarter .. 26th, 5h. 22m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	2	59	3	25	25	4	4	49	5	17	12	8
2	Thursday	3	50	4	16	26	10	5	43	6	9	14	7
3	Friday ..	4	39	5	3	28	0	6	33	6	57	16	0
4	Saturday..	5	26	5	48	28	4	7	21	7	44	16	5
5	Sunday ..	6	9	6	32	28	11	8	6	8	28	17	2
6	Monday..	6	55	7	17	28	9	8	51	9	13	17	0
7	Tuesday..	7	41	8	6	28	2	9	36	9	58	16	3
8	Wednesday	8	32	8	55	27	1	10	21	10	42	14	11
9	Thursday	9	19	9	47	25	9	11	2	11	27	13	3
10	Friday ..	10	14	10	40	24	4	11	54	..	11	5	11
11	Saturday..	11	9	11	41	23	2	0	22	0	56	10	0
12	Sunday ..	..		0	17	22	10	1	30	2	9	9	7
13	Monday..	0	56	1	37	23	4	2	45	3	24	10	2
14	Tuesday..	2	13	2	42	24	3	3	58	4	30	11	4
15	Wednesday	3	11	3	35	25	2	5	1	5	27	12	6
16	Thursday	4	2	4	27	25	10	5	56	6	21	13	4
17	Friday ..	4	48	5	10	26	3	6	42	7	4	13	10
18	Saturday..	5	29	5	46	26	6	7	23	7	42	14	2
19	Sunday ..	6	4	6	23	26	7	8	1	8	19	14	3
20	Monday..	6	40	6	57	26	3	8	36	8	53	13	10
21	Tuesday..	7	13	7	29	25	11	9	9	9	24	13	5
22	Wednesday	7	48	8	5	25	4	9	41	9	57	12	8
23	Thursday	8	24	8	42	24	8	10	14	10	31	11	10
24	Friday ..	9	1	9	21	23	10	10	47	11	5	10	10
25	Saturday..	9	41	10	3	23	1	11	22	11	43	9	11
26	Sunday ..	10	27	10	50	22	4	..		0	8	8	11
27	Monday..	11	19	11	52	22	1	0	35	1	6	8	8
28	Tuesday..	..		0	25	22	6	1	42	2	16	9	2
29	Wednesday	0	59	1	34	23	6	2	48	3	21	10	5
30	Thursday	2	8	2	38	24	11	3	54	4	25	12	2
31	Friday ..	3	7	3	36	26	5	4	57	5	29	14	1

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 4th, 7h. 40m. a.m. | Full Moon .. 18th, 1h. 53m. p.m.
 First Quarter. 10th, 10h. 4m. p.m. | Last Quarter. 26th, 5h. 22m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	3	34	4	0	19	2	4	21	4	49	26	11
2	Thursday	4	25	4	51	21	1	5	15	5	41	29	3
3	Friday ..	5	14	5	38	22	6	6	5	6	29	31	1
4	Saturday..	6	1	6	23	22	11	6	53	7	16	31	6
5	Sunday ..	6	44	7	7	23	8	7	38	7	59	32	6
6	Monday..	7	30	7	52	23	6	8	23	8	45	32	2
7	Tuesday..	8	16	8	41	22	9	9	8	9	30	31	4
8	Wednesday	9	7	9	30	21	5	9	53	10	14	29	8
9	Thursday	9	54	10	22	19	9	10	34	10	59	27	6
10	Friday ..	10	49	11	15	17	11	11	26	11	54	25	3
11	Saturday..	11	44	..	16	6	..	..	0	28	23	6	0
12	Sunday ..	0	16	0	52	16	1	1	2	1	41	23	0
13	Monday..	1	31	2	12	16	8	2	17	2	56	23	9
14	Tuesday..	2	48	3	17	17	10	3	30	4	2	25	2
15	Wednesday	3	46	4	10	19	0	4	33	4	59	26	7
16	Thursday	4	37	5	2	19	10	5	28	5	53	27	8
17	Friday ..	5	23	5	45	20	4	6	14	6	36	28	4
18	Saturday..	6	4	6	21	20	8	6	55	7	14	28	9
19	Sunday ..	6	39	6	58	20	9	7	33	7	51	28	11
20	Monday..	7	15	7	32	20	4	8	8	8	25	28	4
21	Tuesday..	7	48	8	4	19	11	8	41	8	56	27	10
22	Wednesday	8	23	8	40	19	2	9	13	9	29	26	11
23	Thursday	8	59	9	17	18	4	9	46	10	2	25	10
24	Friday ..	9	36	9	56	17	4	10	19	10	37	24	6
25	Saturday..	10	16	10	38	16	5	10	54	11	15	23	5
26	Sunday ..	11	2	11	25	15	5	11	40	..	22	3	0
27	Monday..	11	54	..	15	2	0	0	7	0	38	21	10
28	Tuesday..	0	27	1	0	15	8	1	14	1	48	22	6
29	Wednesday	1	34	2	9	16	11	2	20	2	52	24	0
30	Thursday	2	43	3	13	18	8	3	26	3	57	26	3
31	Friday ..	3	42	4	11	20	7	4	29	5	1	28	7

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 4th, 7h. 40m. a.m. | Full Moon .. 18th, 1h. 52m. p.
 First Quarter. 10th, 10h. 4m. p.m. | Last Quarter. 26th, 5h. 22m. p.

M. D.	WEEK DAYS.	Ilfracombe.						Llanelly.						Milford Haven					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	3	9	3	35	18	11	3	44	4	10	19	5	3	44	4	10	18	
2	Thursday	4	0	4	26	20	7	4	35	5	1	21	1	4	35	5	1	20	
3	Friday ..	4	49	5	13	21	10	5	24	5	48	22	4	5	24	5	48	21	
4	Saturday..	5	36	5	58	22	2	6	11	6	33	22	8	6	11	6	33	21	
5	Sunday ..	6	19	6	42	22	10	6	54	7	17	23	4	6	54	7	17	22	
6	Monday..	7	5	7	27	22	8	7	40	8	2	23	2	7	40	8	2	22	
7	Tuesday..	7	51	8	16	22	0	8	26	8	51	22	6	8	26	8	51	21	
8	Wednesday	8	42	9	5	20	10	9	17	9	40	21	4	9	17	9	40	20	
9	Thursday	9	29	9	57	19	5	10	4	10	32	19	11	10	4	10	32	19	
10	Friday ..	10	24	10	50	17	10	10	59	11	25	18	4	10	59	11	25	17	
11	Saturday..	11	19	11	51	16	7	11	54	..	17	1	1	11	54	..	16		
12	Sunday ..	..	0	27	16	2		0	26	1	2	16	8	0	26	1	2	16	
13	Monday..	1	6	1	47	16	9	1	41	2	22	17	3	1	41	2	22	16	
14	Tuesday..	2	23	2	52	17	9	2	58	3	27	18	3	2	58	3	27	17	
15	Wednesday	3	21	3	45	18	9	3	56	4	20	19	3	3	56	4	20	18	
16	Thursday	4	12	4	37	19	6	4	47	5	12	20	0	4	47	5	12	19	
17	Friday ..	4	58	5	20	19	11	5	33	5	55	20	5	5	33	5	55	19	
18	Saturday..	5	39	5	56	20	2	6	14	6	31	20	8	6	14	6	31	20	
19	Sunday ..	6	14	6	33	20	3	6	49	7	8	20	9	6	49	7	8	20	
20	Monday..	6	50	7	7	19	11	7	25	7	42	20	5	7	25	7	42	19	
21	Tuesday..	7	23	7	39	19	7	7	58	8	14	20	1	7	58	8	14	19	
22	Wednesday	7	58	8	15	18	11	8	33	8	50	19	5	8	33	8	50	18	
23	Thursday	8	34	8	52	18	2	9	9	9	27	18	8	9	9	9	27	18	
24	Friday ..	9	11	9	31	17	4	9	46	10	6	17	10	9	46	10	6	17	
25	Saturday	9	51	10	13	16	6	10	26	10	48	17	0	10	26	10	48	16	
26	Sunday ..	10	38	11	0	15	8	11	12	11	35	16	2	11	12	11	35	15	
27	Monday..	11	29	..	15	5		..	0	4	15	11		..	0	4	15		
28	Tuesday..	0	2	0	35	15	10	0	37	1	10	16	4	0	37	1	10	16	
29	Wednesday	1	9	1	44	16	11	1	44	2	19	17	5	1	44	2	19	17	
30	Thursday	2	18	2	48	18	6	2	53	3	23	19	0	2	53	3	23	19	
31	Friday ..	3	17	3	46	20	1	3	52	4	21	20	7	3	52	4	21	19	

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 30m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 4th, 7h. 40m. a.m. | Full Moon .. 18th, 1h. 52m. p.m.
 First Quarter. 10th, 10h. 4m. p.m. | Last Quarter. 26th, 5h. 22m. p.m.

M. D.	W. D.	Newport.				Swansea.				Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.	
		H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.
1	Wd	4 29	4 57	26	0	3 34	4 02	20	2	9 5	9 28	11 54	..	11 54	..	..	..
2	Th	5 23	5 49	28	7	4 25	4 51	22	1	9 48	10 9	0 19	0 42	0 19	0 42	..	..
3	Fri	6 13	6 37	30	9	5 14	5 38	23	6	10 28	10 50	1 4	1 26	1 4	1 26	..	..
4	Sat	7 1	7 24	31	3	6 1	6 23	23	11	11 12	11 33	1 46	2 7	1 46	2 7	..	..
5	Sun	7 46	8 8	32	4	6 44	7 7	24	8	11 55	..	2 28	2 49	2 28	2 49	..	..
6	Mo	8 31	8 53	32	0	7 30	7 52	24	6	0 18	0 41	3 10	3 32	3 10	3 32	..	..
7	Tu	9 16	9 38	31	1	8 16	8 41	23	9	1 4	1 29	3 54	4 16	3 54	4 16	..	..
8	Wd	10 1	10 22	29	1	9 7	9 30	22	5	1 52	2 17	4 40	5 4	4 40	5 4	..	..
9	Th	10 42	11 7	26	9	9 54	10 22	20	9	2 41	3 6	5 30	5 55	5 30	5 55	..	..
10	Fri	11 34	..	24	0	10 49	11 15	18	11	3 36	4 8	6 21	6 53	6 21	6 53	..	..
11	Sat	0 2	0 36	22	1	11 44	..	17	6	4 41	5 20	7 25	7 58	7 25	7 58	..	..
12	Sun	1 10	1 49	21	6	0 16	0 52	17	1	5 58	6 42	8 36	9 14	8 36	9 14	..	..
13	Mo	2 25	3 4	22	5	1 31	2 12	17	8	7 18	7 54	9 52	10 27	9 52	10 27	..	..
14	Tu	3 38	4 10	23	11	2 48	3 17	18	10	8 25	8 51	11 6	11 37	11 6	11 37	..	..
15	Wd	4 41	5 7	25	8	3 46	4 10	20	0	9 15	9 35	..	0 4	..	0 4	..	..
16	Th	5 36	6 1	26	11	4 37	5 2	20	10	9 58	10 19	0 29	0 50	0 29	0 50	..	..
17	Fri	6 22	6 44	27	8	5 23	5 45	21	4	10 36	10 56	1 14	1 36	1 14	1 36	..	..
18	Sat	7 3	7 22	28	1	6 4	6 21	21	8	11 14	11 31	1 54	2 13	1 54	2 13	..	..
19	Sun	7 41	7 59	28	3	6 39	6 58	21	9	11 50	..	2 30	2 47	2 30	2 47	..	..
20	Mo	8 16	8 33	27	8	7 15	7 32	21	4	0 9	0 26	3 5	3 23	3 5	3 23	..	..
21	Tu	8 49	9 4	27	1	7 48	8 4	20	11	0 43	1 0	3 39	3 56	3 39	3 56	..	..
22	Wd	9 21	9 37	26	0	8 23	8 40	20	2	1 16	1 34	4 12	4 28	4 12	4 28	..	..
23	Th	9 54	10 10	24	9	8 59	9 17	19	4	1 51	2 9	4 46	5 3	4 46	5 3	..	..
24	Fri	10 27	10 45	23	2	9 36	9 56	18	4	2 27	2 47	5 22	5 40	5 22	5 40	..	..
25	Sat	11 2	11 23	22	0	10 16	10 38	17	5	3 8	3 31	6 1	6 24	6 1	6 24	..	..
26	Sun	11 48	..	20	7	11 2	11 25	16	5	3 55	4 25	6 47	7 12	6 47	7 12	..	..
27	Mo	0 15	0 46	20	1	11 54	..	16	2	4 56	5 31	7 42	8 12	7 42	8 12	..	..
28	Tu	1 22	1 56	20	11	0 27	1 0	16	8	6 12	6 49	8 48	9 26	8 48	9 26	..	..
29	Wd	2 28	3 1	22	8	1 34	2 9	17	11	7 21	7 51	9 59	10 30	9 59	10 30	..	..
30	Th	3 34	4 5	25	2	2 43	3 13	19	8	8 21	8 47	11 2	11 33	11 2	11 33	..	..
31	Fri	4 37	5 9	27	11	3 42	4 11	21	7	9 12	9 36	12 0	..	12 0	..	..	..

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 2nd, 3h. 12m. p.m. | Full Moon .. 17th, 4h. 54m. a.m.
 First Quarter. 9th, 6h. 37m. a.m. | Last Quarter . 25th, 5h. 27m. a.m.

M. D.	WEEK DAYS.	Barnstaple.						Bridgewater.						Bristol.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Saturday.	4	4	4	33	27	8	5	58	6	27	15	7	5	38	6	7	29	11
2	Sunday ..	5	1	5	27	28	0	6	55	7	22	16	0	6	35	7	2	30	6
4	Monday ..	5	52	6	16	28	7	7	48	8	12	16	9	7	28	7	52	31	6
3	Tuesday...	6	42	7	7	28	8	8	38	9	3	16	10	8	18	8	43	31	8
5	Wednesdy	7	31	7	57	28	2	9	26	9	50	16	3	9	6	9	30	30	10
6	Thursady.	8	24	8	49	27	3	10	14	10	36	15	1	9	54	10	16	29	2
7	Friday ..	9	10	9	35	26	2	10	56	11	17	13	9	10	36	10	57	27	2
8	Saturday..	10	0	10	23	25	0	11	39	..	12	3	11	19	11	43	25	0	
9	Sunday ..	10	49	11	16	23	9	0	3	0	34	10	9	..	0	14	22	9	
10	Monday ..	11	46	..	23	0		1	4	1	36	9	9	0	44	1	16	21	5
11	Tuesday..	0	18	0	50	22	10	2	10	2	40	9	7	1	50	2	20	21	1
12	Wednesday	1	25	1	59	23	3	3	12	3	44	10	1	2	52	3	24	21	10
13	Thursday.	2	32	3	4	24	0	4	19	4	54	11	0	3	59	4	34	23	3
14	Friday ..	3	31	3	57	24	8	5	24	5	50	10	10	5	4	5	30	24	4
15	Saturday..	4	21	4	44	25	3	6	15	6	38	12	7	5	55	6	18	25	6
16	Sunday ..	5	6	5	25	25	6	7	1	7	20	12	11	6	41	7	0	25	11
17	Monday ..	5	46	6	3	25	10	7	42	8	0	13	4	7	22	7	40	26	6
18	Tuesday..	6	20	6	38	25	11	8	16	8	34	13	5	7	56	8	14	26	8
19	Wednesday	6	56	7	12	25	11	8	52	9	8	13	5	8	32	8	48	26	8
20	Thursday.	7	29	7	47	25	8	9	24	9	40	13	1	9	4	9	20	26	2
21	Friday ..	8	6	8	25	25	4	9	58	10	15	12	8	9	38	9	55	25	8
22	Saturday..	8	45	9	1	24	10	10	32	10	48	12	1	10	12	10	28	24	8
23	Sunday ..	9	20	9	39	24	2	11	4	11	2	11	3	10	44	11	1	23	5
24	Monday ..	10	1	10	25	23	8	11	42	..	10	7	11	22	11	45	22	7	
25	Tuesday..	10	47	11	12	23	0	0	5	0	31	9	9	..	0	11	21	5	
26	Wednesday	11	42	..	22	10		0	59	1	31	9	7	0	39	1	11	21	1
27	Thursday.	0	12	0	47	23	2	2	4	2	37	10	0	1	44	2	17	21	8
28	Friday ..	1	24	1	58	24	3	3	11	3	43	11	4	2	51	3	23	23	7
29	Saturday..	2	34	3	8	25	8	4	20	4	59	13	1	4	0	4	39	26	2
30	Sunday ..	3	41	4	11	27	0	5	34	6	5	14	9	5	14	5	45	28	8

The above are in Greenwich Mean Time, if local time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 2nd, 3h. 12m. p.m. | Full Moon .. 17th, 4h. 54m. a.m.
 First Quarter. 9th, 6h. 37m. a.m. | Last Quarter. 25th, 5h. 27m. a.m.

WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
	Morn.		Even.		Height		Morn.		Even.		Height	
	H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.
Saturday ..	4 39	5 8	22	1	5 30	5 59	30	7	6 23	6 52	28	9
Sunday ..	5 36	6 2	22	6	6 27	6 54	31	1	7 20	7 47	29	5
Monday ..	6 27	6 51	23	3	7 20	7 44	31	11	8 13	8 37	30	5
Tuesday ..	7 17	7 42	23	4	8 10	8 35	32	0	9 3	9 28	30	7
Wednesday ..	8 6	8 32	22	9	8 58	9 22	31	4	9 51	10 15	29	8
Thursday ..	8 59	9 24	21	7	9 46	10 8	29	11	10 39	11 1	27	11
Friday ..	9 45	10 10	20	3	10 28	10 49	28	8	11 21	11 42	25	9
Saturday ..	10 35	10 58	18	9	11 11	11 35	26	5	..	0 4	23	6
Sunday ..	11 24	11 51	17	3	..	0 6	24	5	0 28	0 59	21	0
Monday ..	..	0 21	16	3	0 36	1 8	23	3	1 29	2 1	19	7
Tuesday ..	0 53	1 25	16	1	1 42	2 12	23	0	2 35	3 5	19	3
Wednesday ..	2 0	2 34	16	7	2 44	3 16	23	8	3 37	4 9	20	1
Thursday ..	3 7	3 39	17	6	3 51	4 26	24	10	4 44	5 19	21	6
Friday ..	4 6	4 32	18	4	4 56	5 22	25	10	5 49	6 15	22	9
Saturday ..	4 56	5 19	19	1	5 47	6 10	26	9	6 40	7 3	23	11
Sunday ..	5 41	6 0	19	5	6 33	6 52	27	2	7 26	7 45	24	5
Monday ..	6 21	6 38	19	10	7 14	7 32	27	8	8 7	8 25	25	1
Tuesday ..	6 55	7 13	19	11	7 48	8 6	27	10	8 41	8 59	25	3
Wednesday ..	7 31	7 47	19	11	8 24	8 40	27	10	9 17	9 33	25	3
Thursday ..	8 4	8 22	19	7	8 56	9 12	27	5	9 49	10 5	24	9
Friday ..	8 41	9 0	19	2	9 30	9 47	26	11	10 23	10 40	24	1
Saturday ..	9 20	9 36	18	7	10 4	10 20	26	1	10 57	11 13	23	1
Sunday ..	9 55	10 14	17	9	10 36	10 53	25	0	11 29	11 46	21	9
Monday ..	10 36	11 0	17	1	11 13	11 37	24	3	..	0 7	20	10
Tuesday ..	11 22	11 47	16	3	..	0 3	23	3	0 30	0 56	19	7
Wednesday ..	..	0 17	16	1	0 31	1 3	23	0	1 24	1 56	19	3
Thursday ..	0 47	1 22	16	6	1 36	2 9	23	6	2 29	3 2	19	11
Friday ..	1 59	2 33	17	10	2 43	3 15	25	2	3 36	4 8	21	11
Saturday ..	3 9	3 43	19	7	3 52	4 31	27	5	4 45	5 24	24	9
Sunday ..	4 16	4 46	21	3	5 6	5 37	29	6	5 59	6 30	27	5

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 2nd, 3h. 12m. p.m. | Full Moon .. 17th, 4h. 54m. a.m.
 First Quarter. 9th, 6h. 37m. a.m. | Last Quarter. 25th, 5h. 27m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Saturday..	4 14	4 43	21	6	4 49	5 16	22	0	4 49	5 16	21	6
2	Sunday ..	5 11	5 37	21	10	5 46	6 12	22	4	5 46	6 12	21	10
3	Monday..	6 2	6 26	22	6	6 37	7 1	23	0	6 37	7 1	23	0
4	Tuesday..	6 52	7 17	22	7	7 27	7 52	23	1	7 27	7 52	23	1
5	Wednesday	7 41	8 7	22	0	8 16	8 42	22	6	8 16	8 42	21	7
6	Thursday.	8 34	8 59	21	0	9 9	9 31	21	6	9 9	9 34	20	6
7	Friday ..	9 20	9 45	19	10	9 55	10 20	20	4	9 55	10 20	19	10
8	Saturday .	10 10	10 33	18	7	10 45	11 8	19	1	10 45	11 8	18	7
9	Sunday ..	11 0	11 26	17	3	11 34	..	17	9	11 34	..	17	9
10	Monday..	11 56	..	16	4	0 1	0 31	16	10	0 1	0 31	16	10
11	Tuesday..	0 28	1 0	16	2	1 3	1 35	16	8	1 3	1 35	16	8
12	Wednesday	1 35	2 9	16	8	2 10	2 44	17	2	2 10	2 44	16	8
13	Thursday.	2 42	3 14	17	6	3 17	3 49	18	0	3 17	3 49	17	6
14	Friday ..	3 41	4 7	18	2	4 16	4 42	18	8	4 16	4 42	18	8
15	Saturday.	4 31	4 54	18	10	5 6	5 29	19	4	5 6	5 29	18	10
16	Sunday ..	5 16	5 35	19	1	5 51	6 10	19	7	5 51	6 10	19	7
17	Monday..	5 56	6 13	19	6	6 31	6 48	20	0	6 31	6 48	19	6
18	Tuesday.	6 30	6 48	19	7	7 5	7 23	20	1	7 5	7 23	19	7
19	Wednesday	7 6	7 22	19	7	7 41	7 57	20	1	7 41	7 57	19	7
20	Thursday	7 39	7 57	19	3	8 14	8 32	19	9	8 14	8 32	19	9
21	Friday ..	8 16	8 35	18	11	8 51	9 10	19	5	8 51	9 10	18	11
22	Saturday..	8 55	9 11	18	5	9 30	9 46	18	11	9 30	9 46	18	5
23	Sunday ..	9 30	9 50	17	8	10 5	10 24	18	2	10 5	10 24	17	8
24	Monday..	10 11	10 35	17	1	10 46	11 10	17	7	10 46	11 10	17	1
25	Tuesday..	10 57	11 23	16	4	11 32	11 57	16	10	11 32	11 57	16	4
26	Wednesday	11 52	..	16	2	..	0 27	16	8	..	0 27	16	2
27	Thursday	0 22	0 57	16	7	0 57	1 32	17	1	0 57	1 32	16	7
28	Friday ..	1 34	2 8	17	9	2 9	2 43	18	3	2 9	2 43	17	9
29	Saturday..	2 44	3 18	19	3	3 19	3 53	19	9	3 19	3 53	19	3
30	Sunday ..	3 51	4 21	20	9	4 26	4 56	21	3	4 26	4 56	20	9

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 2nd, 3h. 12m. p.m. | Full Moon .. 17th, 4h. 54m. a.m.
 First Quarter. 9th, 6h. 37m. a.m. | Last Quarter. 25th, 5h. 27m. a.m.

M. D.	W. D.	Newport.				Swansea.				Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Sat	5 38	6 7	30	2	4 39	5 8	23	1	10 0	10 24	0 26	0 51	0 26	0 51		
2	Sun	6 35	7 2	30	9	5 36	6 2	23	6	10 48	11 13	1 16	1 41	1 16	1 41		
3	Mo	7 28	7 52	31	8	6 27	6 51	24	3	11 38	..	2 5	2 29	2 5	2 29		
4	Tu	8 18	8 43	31	10	7 17	7 42	24	4	0 2	0 28	2 53	3 16	2 53	3 16		
5	Wd	9 6	9 30	31	1	8 6	8 32	23	9	0 54	1 18	3 41	4 6	3 41	4 6		
6	Th	9 54	10 16	29	5	8 59	9 24	22	7	1 43	2 9	4 30	4 55	4 30	4 55		
7	Fri	10 36	10 57	27	6	9 45	10 10	21	3	2 34	2 57	5 22	5 48	5 22	5 48		
8	Sat	11 19	11 43	25	4	10 35	10 58	19	9	3 24	3 51	6 12	6 40	6 12	6 40		
9	Sun	..	0 14	23	1	11 24	11 51	18	3	4 20	4 55	7 8	7 37	7 8	7 37		
10	Mo	0 44	1 16	21	10	..	0 21	17	3	5 28	6 5	8 11	8 45	8 11	8 45		
11	Tu	1 50	2 20	21	6	0 53	1 25	17	1	6 43	7 13	9 20	9 53	9 20	9 53		
12	Wd	2 52	3 24	22	3	2 0	2 34	17	7	7 44	8 13	10 22	10 54	10 22	10 54		
13	Th	3 59	4 34	23	6	3 7	3 39	18	6	8 42	9 9	11 25	11 55	11 25	11 55		
14	Fri	5 4	5 30	24	9	4 6	4 32	19	4	9 33	9 53	..	0 23	..	0 23		
15	Sat	5 55	6 18	25	10	4 56	5 19	20	1	10 14	10 33	0 47	1 9	0 47	1 9		
16	Sun	6 41	7 0	26	3	5 41	6 0	20	5	10 53	11 11	1 31	1 51	1 31	1 51		
17	Mo	7 22	7 40	26	11	6 21	6 38	20	10	11 31	11 49	2 10	2 27	2 10	2 27		
18	Tu	7 56	8 14	27	1	6 55	7 13	20	11	..	0 6	2 47	3 4	2 47	3 4		
19	Wd	8 32	8 48	27	1	7 31	7 47	20	11	0 24	0 42	3 20	3 37	3 20	3 37		
20	Th	9 4	9 20	26	7	8 4	8 22	20	7	0 59	1 16	3 55	4 11	3 55	4 11		
21	Fri	9 38	9 55	26	0	8 41	9 0	20	2	1 33	1 52	4 28	4 45	4 28	4 45		
22	Sat	10 12	10 28	26	0	9 20	9 36	19	7	2 10	2 30	5 4	5 23	5 4	5 23		
23	Sun	10 44	11 1	23	9	9 55	10 14	18	9	2 47	3 7	5 43	6 2	5 43	6 2		
24	Mo	11 22	11 45	22	11	10 36	11 0	18	1	3 29	3 53	6 23	6 45	6 23	6 45		
25	Tu	..	0 11	21	10	11 22	11 47	17	3	4 22	4 52	7 10	7 39	7 10	7 39		
26	Wd	0 39	1 11	21	6	..	0 17	17	1	5 24	5 59	8 8	8 40	8 8	8 40		
27	Th	1 44	2 17	22	1	0 47	1 22	17	6	6 36	7 10	9 15	9 47	9 15	9 47		
28	Fri	2 51	3 23	23	11	1 59	2 33	18	10	7 43	8 12	10 19	10 53	10 19	10 53		
29	Sat	4 0	4 39	26	7	3 9	3 43	20	7	8 43	9 13	11 24	11 56	11 24	11 56		
30	Sun	5 14	5 45	28	11	4 16	4 46	22	3	9 40	10 6	..	0 27	..	0 27		

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 1st, 9h. 48m. p.m. | Last Quarter. 24th, 2h. 32m. p.m.
 First Quarter 8th, 5h. 31m. p.m. | New Moon .. 31st, 4h. 43m. a.m.
 Full Moon .. 16th, 7h. 56m. p.m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgewater.					Bristol.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Monday..	4	40	5	9	28	0	6	34	7	3	16	0	6	14	6	43	30	6
2	Tuesday..	5	39	6	4	28	3	7	34	8	1	16	4	7	14	7	41	30	11
3	Wednesdy	6	31	6	56	28	8	8	27	8	52	16	10	8	7	8	32	31	8
4	Thursday..	7	20	7	46	28	5	9	16	9	39	16	7	8	56	9	19	31	2
5	Friday ..	8	10	8	33	27	9	10	2	10	22	15	9	9	42	10	2	30	1
6	Saturday ..	8	56	9	18	26	9	10	43	11	1	14	6	10	23	10	41	28	2
7	Sunday ..	9	39	10	0	25	7	11	20	11	40	13	0	11	0	11	20	26	0
8	Monday..	10	23	10	44	24	3	..	0	3	11	4	11	43	..	..	23	7	8
9	Tuesday..	11	8	11	35	23	2	0	27	0	55	10	0	0	7	0	35	21	8
10	Wednesdy	..	0	5	22	4	1	1	24	1	56	8	11	1	4	1	36	20	2
11	Thursday..	0	37	1	13	22	2	2	28	3	1	8	9	2	8	2	41	19	11
12	Friday ..	1	50	2	27	22	8	3	36	4	13	9	4	3	16	3	53	20	9
13	Saturday..	2	59	3	28	23	6	4	49	5	20	10	5	4	29	5	0	22	3
14	Sunday ..	3	53	4	16	24	4	5	47	6	9	11	5	5	27	5	49	23	9
15	Monday..	4	42	5	4	25	1	6	36	6	58	12	5	6	16	6	38	25	2
16	Tuesday..	5	24	5	44	25	5	7	19	7	39	12	10	6	59	7	19	25	9
17	Wednesdy	6	1	6	18	25	11	7	58	8	14	13	5	7	38	7	54	26	8
18	Thursday..	6	35	6	52	26	3	8	31	8	48	13	10	8	11	8	28	27	4
19	Friday ..	7	9	7	27	26	3	9	5	9	22	13	10	8	45	9	2	27	4
20	Saturday..	7	45	8	3	26	2	9	38	9	55	13	9	9	18	9	35	27	2
21	Sunday ..	8	21	8	40	25	11	10	12	10	28	13	5	9	52	10	8	26	8
22	Monday..	8	57	9	17	25	5	10	44	11	1	12	10	10	24	10	41	25	9
23	Tuesday..	9	36	9	58	24	9	11	18	11	38	12	0	10	58	11	18	24	6
24	Wednesdy	10	19	10	42	24	0	11	58	..	11	0	11	38	..	..	23	3	3
25	Thursday..	11	8	11	37	23	2	0	25	0	54	10	0	0	5	0	34	21	8
26	Friday ..	..	0	11	23	1	1	1	26	2	3	9	11	1	6	1	43	21	7
27	Saturday..	0	50	1	32	23	6	2	40	3	18	10	5	2	20	2	58	22	3
28	Sunday ..	2	13	2	49	24	11	3	58	4	38	12	2	3	38	4	18	24	10
29	Monday..	3	24	3	59	26	6	5	16	5	52	14	2	4	53	5	32	27	10
30	Tuesday..	4	29	5	1	27	9	6	23	6	55	15	9	6	3	6	35	30	1
31	Wednesdy	5	30	5	54	28	2	7	24	7	50	16	3	7	4	7	30	30	10

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m — Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 1st, 9h. 48m. p.m. Last Quarter.. 24th, 2h. 32m. p.m.
 First Quarter. 8th, 6h. 31m. p.m. New Moon .. 31st, 4h. 43m. a.m.
 Full Moon .. 16th, 7h. 56m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even		Height		Morn		Even		Height	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Monday ..	5 15	5 44	22 6	6	6 6	6 35	31 1	1	6 59	7 28	29 9	9
2	Tuesday ..	6 14	6 39	22 10	10	7 6	7 33	31 5	5	7 59	8 26	29 9	9
3	Wednesday ..	7 6	7 31	23 4	4	7 59	8 24	32 0	0	8 52	9 17	30 7	7
4	Thursday ..	7 55	8 21	23 1	1	8 48	9 11	31 8	8	9 41	10 4	30 1	1
5	Friday ..	8 45	9 8	22 3	3	9 34	9 54	30 9	9	10 27	10 47	28 11	11
6	Saturday ..	9 31	9 53	21 0	0	10 15	10 33	29 1	1	11 8	11 26	26 11	11
7	Sunday ..	10 14	10 35	19 6	6	10 53	11 12	27 3	3	11 45	..	24 7	7
8	Monday ..	10 58	11 19	17 10	10	11 35	11 59	25 2	2	0 5	0 27	21 11	11
9	Tuesday ..	11 43	..	16 6	6	..	0 27	23 6	6	0 52	1 20	19 11	11
10	Wednesday ..	0 10	0 40	15 5	5	0 56	1 28	22 3	3	1 49	2 21	18 4	4
11	Thursday ..	1 12	1 48	15 3	3	2 0	2 33	22 0	0	2 53	3 26	18 0	0
12	Friday ..	2 25	3 2	15 10	10	3 8	3 45	22 9	9	4 1	4 38	18 11	11
13	Saturday ..	3 34	4 3	16 11	11	4 21	4 52	24 0	0	5 14	5 45	20 6	6
14	Sunday ..	4 28	4 51	17 11	11	5 19	5 41	25 3	3	6 12	6 34	22 1	1
15	Monday ..	5 17	5 39	18 11	11	6 8	6 30	26 6	6	7 1	7 23	23 7	7
16	Tuesday ..	5 59	6 12	19 4	4	6 51	7 11	27 0	0	7 44	8 4	24 3	3
17	Wednesday ..	6 36	6 53	19 11	11	7 30	7 46	27 10	10	8 23	8 39	25 3	3
18	Thursday ..	7 10	7 27	20 4	4	8 3	8 20	28 4	4	8 56	9 13	25 11	11
19	Friday ..	7 44	8 2	20 4	4	8 37	8 54	28 4	4	9 30	9 47	25 11	11
20	Saturday ..	8 20	8 38	20 3	3	9 10	9 27	28 3	3	10 3	10 20	25 9	9
21	Sunday ..	8 56	9 15	19 11	11	9 44	9 59	27 10	10	10 37	10 53	25 3	3
22	Monday ..	9 32	9 52	19 4	4	10 16	10 33	27 0	0	11 9	11 26	24 3	3
23	Tuesday ..	10 11	10 33	18 6	6	10 50	11 10	26 0	0	11 43	..	23 0	0
24	Wednesday ..	10 54	11 17	17 6	6	11 30	11 57	24 10	10	0 3	0 23	21 6	6
25	Thursday ..	11 43	..	16 6	6	..	0 26	23 6	6	0 50	1 19	19 11	11
26	Friday ..	0 12	0 46	16 5	5	0 58	1 35	23 5	5	1 51	2 28	19 9	9
27	Saturday ..	1 25	2 7	16 11	11	2 12	2 50	24 0	0	3 5	3 43	20 6	6
28	Sunday ..	2 48	3 24	18 8	8	3 30	4 10	26 3	3	4 23	5 3	23 4	4
29	Monday ..	3 59	4 34	20 8	8	4 48	5 24	28 9	9	5 41	6 17	26 5	5
30	Tuesday ..	5 4	5 36	22 4	4	5 55	6 27	30 9	9	6 48	7 20	28 11	11
31	Wednesday ..	6 5	6 29	22 9	9	6 56	7 22	31 4	4	7 49	8 15	29 8	8

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 16m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 1st, 9h. 48m. p.m. | Last Quarter. 24th, 2h. 32m. p.
 First Quarter. 8th, 5h. 31m. p.m. | New Moon .. 31st, 4h. 43m. a.
 Full Moon .. 16th, 7h. 56m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Monday ..	4	50	5	19	21	10	5	25	5	54	22	4
2	Tuesday ..	5	49	6	14	22	1	6	24	6	49	22	7
4	Wednesday	6	41	7	6	22	7	7	16	7	41	23	1
3	Thursday ..	7	30	7	56	22	4	8	5	8	31	22	10
5	Friday ..	8	20	8	43	21	7	8	55	9	18	22	1
6	Saturday ..	9	6	9	28	20	6	9	41	10	3	21	0
7	Sunday ..	9	50	10	10	19	2	10	24	10	45	19	8
8	Monday ..	10	33	10	54	17	9	11	8	11	29	18	3
9	Tuesday ..	11	19	11	45	16	7	11	53	..	17	1	11
10	Wednesday	..	0	15	15	8	0	0	20	0	50	16	2
11	Thursday ..	0	48	1	23	15	6	1	22	1	58	16	0
12	Friday ..	2	0	2	37	16	0	2	35	3	12	16	6
13	Saturday ..	3	9	3	38	16	11	3	44	4	13	17	5
14	Sunday ..	4	3	4	26	17	10	4	38	5	1	18	4
15	Monday ..	4	52	5	14	18	8	5	27	5	49	19	2
16	Tuesday ..	5	34	5	54	19	0	6	9	6	29	19	6
17	Wednesday	6	11	6	28	19	7	6	46	7	3	20	1
18	Thursday ..	6	45	7	2	19	11	7	20	7	37	20	5
19	Friday ..	7	19	7	37	19	11	7	54	8	12	20	5
20	Saturday ..	7	55	8	13	19	10	8	30	8	48	20	4
21	Sunday ..	8	31	8	50	19	7	9	6	9	25	20	1
22	Monday ..	9	7	9	27	19	0	9	42	10	2	19	6
23	Tuesday ..	9	46	10	8	18	4	10	21	10	43	18	10
24	Wednesday	10	29	10	52	17	6	11	4	11	27	18	0
25	Thursday ..	11	18	11	47	16	7	11	53	..	17	1	11
26	Friday ..	..	0	21	16	6	0	0	22	0	56	17	0
27	Saturday ..	1	0	1	42	16	11	1	35	2	17	17	5
28	Sunday ..	2	23	2	59	18	6	2	58	3	34	19	0
29	Monday ..	3	33	4	9	20	2	4	9	4	44	20	8
30	Tuesday ..	4	39	5	11	21	7	5	14	5	46	22	1
31	Wednesday	5	40	6	4	22	0	6	15	6	39	22	6

The above are in Greenwich Mean Time, if local Time be required for
 Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 1st, 9h. 48m. p.m. | Last Quarter. 24th, 2h. 32m. p.m.
 First Quarter. 8th, 5h. 31m. p.m. | New Moon .. 31st, 4h. 43m. a.m.
 Full Moon .. 16th, 7h. 56m. p.m.

W.	Newport.						Swansea.						Liverpool.				London.			
	Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Morn.		Even.	
	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.	H.	M.
Mo.	6	14	6	43	30	9	5	15	5	44	23	6	10	29	10	55	0	55	1	22
Tu	7	14	7	41	31	2	6	14	6	39	23	10	11	24	11	50	1	47	2	12
Wd	8	7	8	32	31	10	7	6	7	31	24	4	..	0	17	2	40	3	5	
Th	8	56	9	19	31	5	7	55	8	21	24	1	0	42	1	7	3	31	3	55
Fri	9	42	10	2	30	4	8	45	9	8	23	3	1	32	1	55	4	19	4	44
Sat	10	23	10	41	28	5	9	31	9	53	22	0	2	18	2	42	5	8	5	31
Sun	11	0	11	20	26	5	10	14	10	35	20	6	3	5	3	29	5	56	6	20
Mo.	11	43	..	23	11		10	58	11	19	18	10	3	52	4	19	6	45	7	9
Tu	0	7	0	35	22	1	11	43	..	17	6		4	48	5	19	7	36	8	4
Wd	1	4	1	36	20	7	0	10	0	40	16	5	5	51	6	27	8	35	9	8
Th	2	8	2	41	20	3	1	12	1	48	16	3	7	1	7	34	9	39	10	11
Fri	3	16	3	53	21	2	2	25	3	2	16	10	8	5	8	37	10	43	11	17
Sat	4	29	5	0	22	8	3	34	4	3	17	11	9	5	9	30	11	50	..	
Sun	5	27	5	49	24	0	4	28	4	51	18	11	9	51	10	9	0	19	0	44
Mo.	6	16	6	38	25	6	5	17	5	39	19	11	10	31	10	51	1	6	1	26
Tu	6	59	7	19	26	1	5	59	6	19	20	4	11	10	11	29	1	49	2	8
Wd	7	38	7	54	27	1	6	36	6	53	20	11	11	47	..		2	26	2	45
Th	8	11	8	28	27	8	7	10	7	27	21	4	0	4	0	21	3	2	3	18
Fri	8	45	9	2	27	8	7	44	8	2	21	4	0	38	0	56	3	35	3	51
Sat	9	18	9	35	27	6	8	20	8	38	21	3	1	14	1	31	4	8	4	26
Sun	9	52	10	8	27	1	8	56	9	15	20	11	1	49	2	6	4	43	5	1
Mo.	10	24	10	41	26	1	9	32	9	52	20	4	2	25	2	43	5	19	5	38
Tu	10	58	11	18	24	11	10	11	10	33	19	6	3	4	3	25	5	57	6	19
Wd	11	38	..	23	6		10	54	11	17	18	6	3	49	4	14	6	41	7	6
Th	0	5	0	34	22	1	11	43	..	17	6		4	45	5	18	7	31	8	1
Fri	1	6	1	43	22	0	0	12	0	46	17	5	5	54	6	35	8	34	9	10
Sat	2	20	2	58	22	8	1	25	2	7	17	11	7	13	7	49	9	46	10	22
Sun	3	38	4	18	25	2	2	48	3	24	19	8	8	25	8	57	11	0	11	37
Mo.	4	56	5	32	28	1	3	59	4	34	21	8	9	27	9	55	..	0	10	
Tu	6	3	6	35	30	4	5	4	5	36	23	4	10	21	10	48	0	41	1	11
Wd	7	4	7	30	31	1	6	5	6	29	23	9	11	15	11	40	1	38	2	5

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 7th, 7h. 8m. a.m. | Last Quarter. 22nd, 9h. 22m. p.m.
 Full Moon .. 15th, 10h. 37m. a.m. | New Moon .. 29th, 1h. 4m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.					Cardiff.					Gloucester.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H.	M.	H.	M.	F.	H.	M.	H.	M.	F.	H.	M.	H.	M.	F.
1	Thursday.	6	53	7	17	23	6	7	46	8	10	32	2	8	39	9
2	Friday ..	7	39	8	1	23	4	8	32	8	53	32	0	9	25	9
3	Saturday..	8	23	8	44	22	9	9	13	9	33	31	4	10	6	10
4	Sunday ..	9	4	9	24	21	7	9	51	10	8	29	11	10	44	11
5	Monday..	9	45	10	4	20	2	10	28	10	43	28	1	11	21	11
6	Tuesday..	10	26	10	45	18	6	11	3	11	21	26	0	11	56	..
7	Wednesday	11	5	11	27	16	7	11	42	..	23	8	0	14	0	35
8	Thursday.	11	53	..	15	0	0	8	0	37	21	8	1	1	1	30
9	Friday ..	0	24	0	59	14	1	1	11	1	47	20	7	2	4	2
10	Saturday..	1	39	2	20	14	5	2	24	3	3	21	0	3	17	3
11	Sunday ..	2	53	3	32	15	8	3	36	4	18	22	6	4	29	5
12	Monday..	4	0	4	26	17	1	4	49	5	17	24	3	5	42	6
13	Tuesday..	4	49	5	14	18	6	5	40	6	5	26	0	6	33	6
14	Wednesday	5	37	5	58	19	7	6	28	6	50	27	5	7	21	7
15	Thursday.	6	16	6	31	20	2	7	8	7	24	28	1	8	1	8
16	Friday ..	6	47	7	6	21	0	7	41	7	59	29	1	8	34	8
17	Saturday..	7	23	7	39	21	6	8	16	8	32	29	9	9	9	9
18	Sunday ..	7	56	8	13	21	6	8	48	9	5	29	9	9	41	9
19	Monday..	8	32	8	52	21	3	9	22	9	40	29	6	10	15	10
20	Tuesday..	9	11	9	28	20	7	9	57	10	12	28	7	10	50	11
21	Wednesday	9	47	10	8	19	6	10	29	10	46	27	3	11	22	11
22	Thursday.	10	28	10	55	18	3	11	6	11	31	25	8	11	59	..
23	Friday ..	11	19	11	48	16	8	11	59	..	23	9	0	24	0	52
24	Saturday..	..	0	22	16	1	1	0	31	1	9	23	0	1	24	2
25	Sunday ..	1	4	1	48	16	5	1	52	2	33	23	5	2	45	3
26	Monday..	2	33	3	12	18	1	3	15	3	56	25	5	4	8	4
27	Tuesday..	3	48	4	22	20	3	4	36	5	12	28	3	5	29	6
28	Wednesday	4	54	5	22	22	9	5	45	6	13	30	6	6	38	7
29	Thursday.	5	47	6	14	22	6	6	39	7	6	31	1	7	32	7
30	Friday ..	6	34	6	55	23	6	7	28	7	48	32	2	8	21	8
31	Saturday .	7	18	7	38	23	7	8	11	8	31	32	4	9	4	9

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 7th, 7h. 8m. a.m. | Last Quarter. 22nd, 9h. 22m. p.m.
 Full Moon .. 15th, 10h. 37m. a.m. | New Moon .. 29th, 1h. 4m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday.	6	28	6	52	22	8	7	3	7	27	22	3
2	Friday ..	7	14	7	36	22	7	7	49	8	11	22	2
3	Saturday..	7	58	8	19	22	0	8	33	8	54	21	8
4	Sunday ..	8	39	8	59	21	0	9	14	9	34	20	9
5	Monday..	9	20	9	39	19	9	9	55	10	14	19	7
6	Tuesday..	10	1	10	20	18	4	10	36	10	55	18	3
7	Wednesdy	10	40	11	2	16	8	11	15	11	37	16	9
8	Thursday.	11	28	11	59	15	5	..	0	3	15	9	6
9	Friday ..	..	..	0	34	14	6	0	34	1	9	15	0
10	Saturday..	1	14	1	55	14	9	1	49	2	30	15	3
11	Sunday ..	2	28	3	7	15	10	3	3	3	42	16	0
12	Monday..	3	35	4	1	17	1	4	10	4	36	17	2
13	Tuesday..	4	24	4	49	18	4	4	59	5	24	18	3
14	Wednesdy	5	12	5	33	19	3	5	47	6	8	19	2
15	Thursday.	5	51	6	6	19	9	6	26	6	41	20	3
16	Friday ..	6	22	6	41	20	6	6	57	7	16	21	0
17	Saturday..	6	58	7	14	20	11	7	33	7	49	21	5
18	Sunday ..	7	31	7	48	20	11	8	6	8	23	21	5
19	Monday..	8	7	8	27	20	9	8	42	9	2	21	3
20	Tuesday..	8	46	9	3	20	1	9	21	9	38	20	7
21	Wednesdy	9	22	9	43	19	2	9	57	10	18	19	8
22	Thursday.	10	3	10	30	18	1	10	38	11	5	18	7
23	Friday ..	10	54	11	23	16	9	11	29	11	58	17	3
24	Saturday .	11	57	..	..	16	2	..	0	32	16	8	..
25	Sunday ..	0	39	1	23	16	6	1	14	1	58	17	0
26	Monday..	2	8	2	47	17	11	2	43	3	22	18	5
27	Tuesday..	3	23	3	57	19	10	3	58	4	32	20	4
28	Wednesdy	4	29	4	57	21	5	5	4	5	32	21	11
29	Thursday.	5	22	5	49	21	10	5	57	6	24	22	4
30	Friday ..	6	9	6	30	22	8	6	44	7	5	23	2
31	Saturday..	6	53	7	13	22	9	7	28	7	48	23	3

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 7th, 7h. 8m. a.m. | Last Quarter. 22nd, 9h. 22m. p.m.
 Full Moon .. 15th, 10h. 37m. a.m. | New Moon .. 29th, 1h. 4m. p.m.

M. D.	W. D.	Newport.						Swansea.						Liverpool.				London.			
		Morn		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Morn.		Even.	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.	H.	M.
1	Th	7	54	8	18	32	0	6	53	7	17	24	6	..	0	4	2	31	2	55	
2	Fri	8	40	9	1	31	10	7	39	8	1	24	4	0	28	0	51	3	18	3	41
3	Sat	9	21	9	41	31	1	8	23	8	44	23	9	1	13	1	34	4	3	4	25
4	Sun	9	59	10	16	29	5	9	4	9	24	22	7	1	54	2	14	4	46	5	7
5	Mo	10	36	10	51	27	4	9	45	10	4	21	2	2	34	2	57	5	27	5	48
6	Tu	11	11	11	29	24	11	10	26	10	45	19	6	3	17	3	41	6	12	6	33
7	Wd	11	50	..	22	3	11	5	11	27	17	7	7	4	3	4	28	6	58	7	20
8	Th	0	16	0	45	19	11	11	53	..	16	0	4	4	58	5	30	7	45	8	14
9	Fri	1	19	1	55	18	8	0	24	0	59	15	1	6	8	6	48	8	47	9	23
10	Sat	2	32	3	11	19	2	1	39	2	20	15	5	7	25	8	1	9	58	10	34
11	Sun	3	44	4	26	20	11	2	53	3	32	16	8	8	29	9	3	11	12	11	42
12	Mo	4	57	5	25	22	11	4	0	4	26	18	1	9	28	9	50	..	0	17	
13	Tu	5	48	6	13	24	11	4	49	5	14	19	6	10	8	10	28	0	42	1	5
14	Wd	6	36	6	58	26	7	5	37	5	58	20	7	10	49	11	9	1	25	1	46
15	Th	7	16	7	32	27	4	6	16	6	31	21	2	11	26	11	42	2	6	2	25
16	Fri	7	49	8	7	28	5	6	47	7	6	22	0	11	58	..	..	2	42	2	57
17	Sat	8	24	8	40	29	3	7	23	7	39	22	6	0	17	0	34	3	13	3	31
18	Sun	8	56	9	13	29	3	7	56	8	13	22	6	0	51	1	8	3	47	4	3
19	Mo	9	30	9	48	28	11	8	32	8	52	22	3	1	25	1	43	4	20	4	37
20	Tu	10	5	10	20	27	11	9	11	9	28	21	7	2	2	2	21	4	55	5	15
21	Wd	10	37	10	54	26	5	9	47	10	8	20	6	2	38	2	59	5	34	5	52
22	Th	11	14	11	39	24	6	10	28	10	55	19	3	3	21	3	44	6	14	6	37
23	Fri	..	0	7	22	5	11	11	19	11	48	17	8	4	15	4	48	7	1	7	32
24	Sat	0	39	1	17	21	6	..	0	22	17	1	1	5	24	6	6	8	4	8	40
25	Sun	2	0	2	41	22	0	1	4	1	48	17	5	6	53	7	34	9	21	10	3
26	Mo	3	23	4	4	24	2	2	33	3	12	19	1	8	12	8	46	10	43	11	24
27	Tu	4	44	5	20	27	6	3	48	4	22	21	3	9	17	9	45	11	59	..	..
28	Wd	5	53	6	21	30	1	4	54	5	22	23	9	10	12	10	35	0	31	1	0
29	Th	6	47	7	14	30	9	5	47	6	14	23	6	10	59	11	24	1	29	1	53
30	Fri	7	36	7	56	32	0	6	34	6	55	24	6	11	45	..	..	2	15	2	40
31	Sat	8	19	8	39	32	2	7	18	7	38	24	7	0	6	0	28	3	0	3	20

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 5th, 11h. 31m. p.m. | Last Quarter. 21st, 3h. 8m. a.m.
 Full Moon .. 14th, 12h. 33m. a.m. | New Moon .. 27th, 11h. 41m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.	Even.	Height		Morn.	Even.	Height		Morn.	Even.	Height	
		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.	
1	Sunday ..	7 24	7 42	28 4		9 19	9 37	16 5		8 59	9 17	31 0	
2	Monday..	8 2	8 21	27 6		9 54	10 12	15 5		9 34	9 52	29 8	
3	Tuesday..	8 39	8 56	26 3		10 27	10 43	13 10		10 7	10 23	27 4	
4	Wednesday	9 15	9 34	24 10		10 59	11 15	12 1		10 39	10 55	24 8	
5	Thursday.	9 51	10 12	23 3		11 31	11 52	10 1		11 11	11 32	21 10	
6	Friday ..	10 37	11 2	21 10		..	0 19	8 4		11 59	..	19 2	
7	Saturday..	11 32	..	21 0		0 47	1 21	7 2		0 27	1 1	17 8	
8	Sunday ..	0 10	0 54	21 1		2 2	2 43	7 4		1 42	2 23	17 10	
9	Monday..	1 37	2 17	21 9		3 24	4 3	8 2		3 4	3 43	19 0	
10	Tuesday..	2 51	3 21	23 1		4 40	5 12	9 11		4 20	4 52	21 7	
11	Wednesday	3 45	4 9	24 7		5 38	6 3	11 9		5 18	5 43	24 2	
12	Thursday.	4 30	4 51	25 10		6 24	6 45	13 4		6 4	6 25	26 6	
13	Friday ..	5 10	5 30	26 5		7 4	7 24	14 1		6 44	7 4	27 8	
14	Saturday..	5 45	6 1	27 4		7 40	7 58	15 2		7 20	7 38	29 4	
15	Sunday ..	6 21	6 38	27 11		8 17	8 34	15 11		7 57	8 14	30 5	
16	Monday..	6 56	7 15	28 1		8 52	9 11	16 2		8 32	8 51	30 8	
17	Tuesday..	7 32	7 52	27 9		9 27	9 45	15 9		9 7	9 25	30 1	
18	Wednesday	8 11	8 31	27 2		10 3	10 20	15 0		9 43	10 0	29 0	
19	Thursday.	8 52	9 11	26 1		10 39	10 56	13 8		10 19	10 36	27 0	
20	Friday ..	9 36	10 1	24 10		11 18	11 41	12 1		10 58	11 21	24 8	
21	Saturday..	10 30	11 1	23 5		..	0 10	10 4		11 50	..	22 2	
22	Sunday ..	11 36	..	22 7		0 46	1 25	9 3		0 26	1 5	20 7	
23	Monday..	0 18	1 6	22 11		2 10	2 54	9 8		1 50	2 34	21 3	
24	Tuesday..	1 52	2 28	24 3		3 37	4 15	11 4		3 17	3 55	23 7	
25	Wednesday	3 2	3 35	26 0		4 51	5 27	13 6		4 31	5 7	26 10	
26	Thursday.	4 3	4 30	27 5		5 57	6 24	15 3		5 37	6 4	29 6	
27	Friday ..	4 53	5 18	28 2		6 48	7 12	16 3		6 28	6 52	30 10	
28	Saturday..	5 38	5 57	28 4		7 38	7 53	16 5		7 13	7 33	31 0	
29	Sunday ..	6 18	6 38	28 6		8 14	8 34	16 8		7 54	8 14	31 4	
30	Monday..	6 55	7 12	28 1		8 51	9 8	16 2		8 31	8 48	30 8	

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 6th, 11h. 31m. p.m. | Last Quarter. 21st, 3h. 8m. a.m.
 Full Moon .. 14th, 12h. 33m. a.m. | New Moon .. 27th, 11h. 41m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Sunday ..	7	59	8	17	22	11	8	51	9	9	31	6
2	Monday ..	8	37	8	56	21	11	9	26	9	44	30	4
3	Tuesday ..	9	14	9	31	20	4	9	59	10	15	28	4
4	Wednesdy	9	50	10	9	18	7	10	31	10	47	26	1
5	Thursday.	10	26	10	47	16	7	11	3	11	24	23	8
6	Friday ..	11	12	11	37	14	10	11	51	..	21	5	0
7	Saturday..	..	0	7	13	8	8	0	19	0	52	20	1
8	Sunday ..	0	45	1	29	13	10	1	34	2	15	20	3
9	Monday ..	2	12	2	52	14	8	2	56	3	35	21	3
10	Tuesday ..	3	26	3	56	16	5	4	12	4	44	23	5
11	Wednesdy	4	20	4	44	18	3	5	10	5	35	25	8
12	Thursday.	5	5	5	26	19	10	5	55	6	17	27	8
13	Friday ..	5	45	6	5	20	7	6	36	6	56	28	7
14	Saturday..	6	20	6	36	21	8	7	12	7	30	30	0
15	Sunday ..	6	56	7	13	22	5	7	49	8	6	31	0
16	Monday ..	7	31	7	50	22	8	8	24	8	43	31	3
17	Tuesday ..	8	7	8	27	22	3	8	59	9	17	30	9
18	Wednesdy	8	46	9	6	21	6	9	35	9	52	29	9
19	Thursday.	9	27	9	46	20	2	10	11	10	28	28	1
20	Friday ..	10	11	10	36	18	7	10	50	11	13	26	1
21	Saturday..	11	5	11	36	16	10	11	42	..	23	11	0
22	Sunday ..	..	0	11	15	9	9	0	18	0	57	22	7
23	Monday ..	0	53	1	41	16	2	1	42	2	26	23	2
24	Tuesday ..	2	27	3	3	17	10	3	9	3	47	25	2
25	Wednesdy	3	37	4	10	20	0	4	23	4	59	28	0
26	Thursday.	4	38	5	5	21	10	5	29	5	56	30	2
27	Friday ..	5	28	5	53	22	9	6	20	6	44	31	4
28	Saturday..	6	13	6	32	22	11	7	5	7	26	31	6
29	Sunday ..	6	53	7	13	23	2	7	46	8	6	31	9
30	Monday ..	7	30	7	47	22	8	8	23	8	40	31	3

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 5th, 11h. 31m. p.m. | Last Quarter. 21st, 3h. 8m. a.m.
 Full Moon .. 14th, 12h. 33m. a.m. | New Moon .. 27th, 11h. 41m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Sunday ..	7 34	7 52	22 2	8 9	8 27	22 8	8 9	8 27	21 10			
2	Monday ..	8 12	8 31	21 4	8 47	9 6	21 10	8 47	9 6	21 0			
3	Tuesday ..	8 49	9 6	19 11	9 24	9 41	20 5	9 24	9 41	19 9			
4	Wednesday ..	9 25	9 44	18 5	10 0	10 19	18 11	10 0	10 19	18 4			
5	Thursday ..	10 0	10 22	16 8	10 36	10 57	17 2	10 36	10 57	16 9			
6	Friday ..	10 47	11 12	15 1	11 22	11 47	15 7	11 22	11 47	15 4			
7	Saturday ..	11 42	..	14 1	..	0 17	14 7	..	0 17	14 6			
8	Sunday ..	0 20	1 4	14 3	0 55	1 39	14 9	0 55	1 39	14 7			
9	Monday ..	1 47	2 27	15 0	2 22	3 2	15 6	2 22	3 2	15 3			
10	Tuesday ..	3 1	3 31	16 6	3 36	4 6	17 0	3 36	4 6	16 7			
11	Wednesday ..	3 55	4 19	18 1	4 30	4 54	18 7	4 30	4 54	18 1			
12	Thursday ..	4 40	5 1	19 6	5 15	5 36	20 0	5 15	5 36	19 4			
13	Friday ..	5 20	5 40	20 1	5 55	6 15	20 7	5 55	6 15	19 11			
14	Saturday ..	5 55	6 11	21 1	6 30	6 46	21 7	6 30	6 46	20 10			
15	Sunday ..	6 31	6 48	21 9	7 6	7 23	22 3	7 6	7 23	21 5			
16	Monday ..	7 6	7 25	21 11	7 41	8 0	22 5	7 41	8 0	21 7			
17	Tuesday ..	7 42	8 2	21 7	8 17	8 37	22 1	8 17	8 37	21 3			
18	Wednesday ..	8 21	8 41	20 11	8 56	9 16	21 5	8 56	9 16	20 8			
19	Thursday ..	9 2	9 21	19 9	9 37	9 56	20 3	9 37	9 56	19 7			
20	Friday ..	9 46	10 11	18 5	10 21	10 46	18 11	10 21	10 46	18 4			
21	Saturday ..	10 40	11 11	16 10	11 15	11 46	17 4	11 15	11 46	16 11			
22	Sunday ..	11 46	..	15 11	..	0 21	16 5	..	0 21	16 1			
23	Monday ..	0 28	1 16	16 3	1 3	1 51	16 9	1 3	1 51	16 5			
24	Tuesday ..	2 2	2 38	17 9	2 37	3 13	18 3	2 37	3 13	17 9			
25	Wednesday ..	3 12	3 45	19 8	3 47	4 20	20 2	3 47	4 20	19 6			
26	Thursday ..	4 13	4 40	21 3	4 48	5 15	21 9	4 48	5 15	20 11			
27	Friday ..	5 4	5 28	22 0	5 38	6 3	22 6	5 38	6 3	21 8			
28	Saturday ..	5 48	6 7	22 2	6 23	6 42	22 8	6 23	6 42	21 10			
29	Sunday ..	6 28	6 48	22 5	7 3	7 23	22 11	7 3	7 23	22 0			
30	Monday ..	7 6	7 22	21 11	7 40	7 57	22 5	7 40	7 57	21 7			

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

1st Quarter. 5th, 11h. 31m. p.m. | Last Quarter. 21st, 3h. 8m. a.m.
 Full Moon .. 14th, 12h. 33m. a.m. | New Moon .. 27th, 11h. 41m. p.m.

v. d.	Newport.					Swansea.					Liverpool.				London.			
	Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.	
	H.	M.	H.	M.	P. I.	H.	M.	H.	M.	P. I.	H.	M.	H.	M.	H.	M.	H.	M.
Sun	8	59	9	17	31 3	7	59	8	17	23 11	0	50	1	11	3	42	4	2
Mo	9	34	9	52	29 11	8	37	8	56	22 11	1	29	1	48	4	23	4	41
Tu	10	7	10	23	27 8	9	14	9	31	21 4	2	6	2	24	5	0	5	19
Wd	10	39	10	55	25 0	9	50	10	9	19 7	2	41	3	2	5	37	5	56
Th	11	11	11	32	22 3	10	26	10	47	17 7	3	22	3	41	6	17	6	38
Fri	11	59	..	..	19 7	11	12	11	37	15 10	4	6	4	37	6	58	7	23
Sat	0	27	1	1	18 1	..	..	0	7	14 8	5	10	5	48	7	54	8	26
Sun	1	42	2	23	18 3	0	45	1	29	14 10	6	34	7	16	9	5	9	45
Mo	3	4	3	43	19 5	2	12	2	52	15 8	7	54	8	29	10	25	11	5
Tu	4	20	4	52	22 0	3	26	3	56	17 5	8	59	9	24	11	41	..	..
Wd	5	18	5	43	24 6	4	20	4	44	19 3	9	44	10	4	0	12	0	38
Th	6	4	6	25	26 11	5	5	5	26	20 10	10	22	10	39	0	59	1	20
Fri	6	44	7	4	27 11	5	45	6	5	21 7	10	56	11	15	1	39	1	57
Sat	7	20	7	38	29 7	6	20	6	36	22 8	11	30	11	47	2	13	2	31
Sun	7	57	8	14	30 8	6	56	7	13	23 5	..	0	7	2	46	3	2	..
Mo	8	32	8	51	30 11	7	31	7	50	23 8	0	24	0	42	3	21	3	37
Tu	9	7	9	25	30 4	8	7	8	27	23 3	1	2	1	19	3	55	4	14
Wd	9	43	10	0	29 3	8	46	9	6	22 6	1	38	1	56	4	31	4	50
Th	10	19	10	36	27 4	9	27	9	46	21 2	2	16	2	37	5	9	5	29
Fri	10	58	11	21	25 0	10	11	10	36	19 7	2	58	3	25	5	51	6	13
Sat	11	50	..	..	22 7	11	5	11	36	17 10	3	53	4	28	6	41	7	10
Sun	0	26	1	5	21 0	..	..	0	11	16 9	5	9	5	52	7	45	8	25
Mo	1	50	2	34	21 8	0	53	1	41	17 2	6	43	7	26	9	9	9	53
Tu	3	17	3	55	23 11	2	27	3	3	18 10	8	6	8	38	10	36	11	18
Wd	4	31	5	7	27 3	3	37	4	10	21 0	9	7	9	35	11	51	..	..
Th	5	37	6	4	29 9	4	38	5	5	22 10	9	59	10	22	0	21	0	50
Fri	6	28	6	52	31 1	5	28	5	53	23 9	10	41	11	4	1	15	1	39
Sat	7	13	7	33	31 3	6	13	6	32	23 11	11	23	11	43	1	59	2	20
Sun	7	54	8	14	31 6	6	53	7	13	24 2	..	0	4	2	39	2	58	..
Mo	8	31	8	48	30 11	7	30	7	47	23 8	0	24	0	41	3	18	3	37

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter 5th, 6h. 17m. p.m. | Last Quarter. 20th, 9h. 16m. a.m.
 Full Moon .. 13th, 1h. 24m. p.m. | New Moon .. 27th, 1h. 3m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even		Height		Morn.		Even.		Height	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Tuesday...	7 30	7 48	27 3	3	9 25	9 41	15 1	1	9 5	9 21	29 2	2
2	Wednesday	8 6	8 23	26 2	2	9 58	10 13	13 9	9	9 38	9 53	27 2	2
3	Thursday.	8 42	8 58	24 10	10	10 30	10 46	12 1	1	10 10	10 26	24 8	8
4	Friday ..	9 19	9 38	23 5	5	11 2	11 19	10 4	4	10 42	10 59	22 2	2
5	Saturday ..	10 1	10 28	22 1	1	11 41	..	8 8	8	11 21	11 48	19 9	9
6	Sunday ..	10 53	11 27	21 1	1	0 8	0 38	7 4	4	..	0 18	17 10	10
7	Monday..	..	0 5	20 10	10	1 15	1 56	7 0	0	0 55	1 36	17 4	4
8	Tuesday..	0 48	1 31	21 6	6	2 38	3 17	7 10	10	2 18	2 57	18 7	7
9	Wednesday	2 6	2 38	22 10	10	3 51	4 25	9 7	7	3 31	4 52	21 1	1
10	Thursday.	3 6	3 29	24 4	4	4 56	5 21	11 5	5	4 36	5 12	23 9	9
11	Friday ..	3 51	4 13	25 11	11	5 45	6 7	13 5	5	5 25	5 47	26 8	8
12	Saturday..	4 34	4 52	27 1	1	6 28	6 47	14 11	11	6 8	6 27	28 10	10
13	Sunday ..	5 15	5 32	27 7	7	7 9	7 26	15 6	6	6 49	7 6	29 10	10
14	Monday..	5 50	6 10	28 4	4	7 46	8 7	16 5	5	7 26	7 47	31 0	0
15	Tuesday..	6 31	6 51	28 6	6	8 27	8 47	16 8	8	8 7	8 27	31 4	4
16	Wednesday	7 11	7 30	28 2	2	9 7	9 25	16 3	3	8 47	9 53	30 10	10
17	Thursday.	7 52	8 14	27 6	6	9 45	10 5	15 5	5	9 25	9 45	29 8	8
18	Friday ..	8 38	9 1	26 4	4	10 27	10 48	13 11	11	10 7	10 28	27 6	6
19	Saturday..	9 26	9 52	25 0	0	11 9	11 32	12 3	3	10 49	11 12	25 0	0
20	Sunday ..	10 21	10 52	23 6	6	12 0	..	10 5	5	11 41	..	22 3	3
21	Monday..	11 27	..	22 8	8	0 36	1 16	9 4	4	0 16	0 56	20 9	9
22	Tuesday..	0 8	0 53	23 0	0	2 0	2 42	9 9	9	1 40	2 22	21 5	5
23	Wednesday	1 35	2 13	24 3	3	3 22	3 58	11 4	4	3 2	3 38	23 7	7
24	Thursday.	2 44	3 13	25 7	7	4 31	5 4	13 0	0	4 11	4 44	26 0	0
25	Friday ..	3 42	4 9	26 8	8	5 35	6 0	14 4	4	5 15	5 40	28 1	1
26	Saturday..	4 32	4 52	27 5	5	6 26	6 47	15 3	3	6 6	6 27	29 6	6
27	Sunday ..	5 15	5 33	27 7	7	7 9	7 27	15 6	6	6 49	7 7	29 10	10
28	Monday..	5 51	6 9	27 8	8	7 47	8 6	15 7	7	7 27	7 46	29 11	11
29	Tuesday..	6 28	6 46	27 4	4	8 24	8 42	15 2	2	8 4	8 22	29 4	4
30	Wednesday	7 3	7 19	26 9	9	8 59	9 15	14 6	6	8 39	8 55	28 2	2
31	Thursday.	7 36	7 54	25 11	11	9 31	9 47	13 5	5	9 11	9 27	26 8	8

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 5th, 6h. 17m. p.m. | Last Quarter.. 20th, 9h. 16m. a.m.
 Full Moon .. 13th, 1h. 24m. p.m. | New Moon .. 27th, 1h. 3m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.						Cardiff.						Gloucester.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Tuesday..	8	5	8	23	21	7	8	57	9	13	29	11	9	50	10	6	27	11
2	Wednesday	8	41	8	58	20	3	9	30	9	45	28	3	10	23	10	38	25	9
3	Thursday..	9	17	9	33	18	7	10	2	10	18	26	1	10	55	11	11	23	1
4	Friday ..	9	54	10	13	16	10	10	34	10	51	23	11	11	27	11	44	20	5
5	Saturday..	10	36	11	3	15	2	11	13	11	40	21	10	..	0	6	17	9	
6	Sunday ..	11	28	..	..	13	10	..	0	10	20	3		0	33	1	3	15	10
7	Monday..	0	2	0	40	13	6	0	47	1	29	19	10	1	40	2	21	15	3
8	Tuesday..	1	23	2	6	14	4	2	10	2	49	20	10	3	3	3	42	16	7
9	Wednesday	2	41	3	13	16	1	3	23	3	57	23	0	4	16	4	50	19	3
10	Thursday..	3	41	4	4	17	11	4	28	4	53	25	3	5	21	5	46	22	1
11	Friday ..	4	26	4	48	19	11	5	17	5	39	27	10	6	10	6	32	25	3
12	Saturday..	5	9	5	27	21	5	6	0	6	19	29	8	6	53	7	12	27	7
13	Sunday ..	5	50	6	7	22	0	6	41	6	58	30	6	7	34	7	51	28	7
14	Monday..	6	25	6	45	22	11	7	18	7	39	31	6	8	11	8	32	29	11
15	Tuesday..	7	6	7	26	23	2	7	59	8	19	31	9	8	52	9	12	30	3
16	Wednesday	7	46	8	5	22	9	8	39	8	57	31	4	9	32	9	50	29	8
17	Thursday..	8	27	8	49	21	11	9	17	9	37	30	4	10	10	10	30	28	5
18	Friday ..	9	13	9	36	20	5	9	59	10	20	28	6	10	52	11	13	26	1
19	Saturday..	10	1	10	27	18	9	10	41	11	4	26	5	11	34	11	57	23	6
20	Sunday ..	10	56	11	27	16	11	11	33	..	24	0		..	0	25	20	6	
21	Monday..	..	0	0	2	15	10	0	9	0	48	22	9	1	1	1	41	18	11
22	Tuesday..	0	43	1	28	16	3	1	32	2	14	23	3	2	25	3	7	19	7
23	Wednesday	2	10	2	48	17	10	2	54	3	30	25	2	3	47	4	23	21	11
24	Thursday..	3	19	3	48	19	6	4	3	4	36	27	3	4	56	5	29	24	7
25	Friday ..	4	17	4	44	20	10	5	7	5	32	29	0	6	0	6	25	26	9
26	Saturday..	5	7	5	27	21	10	5	58	6	19	30	2	6	51	7	12	28	3
27	Sunday ..	5	50	6	8	22	0	6	41	6	59	30	6	7	34	7	52	28	7
28	Monday..	6	26	6	44	22	1	7	19	7	38	30	7	8	12	8	31	28	9
29	Tuesday..	7	3	7	21	21	8	7	56	8	14	30	0	8	49	9	7	28	1
30	Wednesday	7	38	7	54	21	0	8	31	8	47	29	1	9	24	9	40	26	11
31	Thursday..	8	11	8	29	19	11	9	3	9	19	27	10	9	56	10	12	25	3

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 5th, 6h. 17m. p.m. | Last Quarter. 20th, 9h. 16m. a.m.
 Full Moon .. 13th, 1h. 24m. p.m. | New Moon .. 27th, 1h. 3m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Tuesday..	7	40	7	58	21	0	8	15	8	33	20	9
2	Wednesday	8	16	8	33	19	10	8	51	9	8	19	8
3	Thursday..	8	52	9	8	18	5	8	27	9	43	18	4
4	Friday ..	9	28	9	48	16	10	10	4	10	23	16	11
5	Saturday..	10	11	10	38	15	5	10	46	11	13	15	7
6	Sunday ..	11	3	11	37	14	3	11	38	..	14	9	7
7	Monday..	..	..	0	15	13	11	0	12	0	50	14	4
8	Tuesday..	0	58	1	41	14	8	1	33	2	16	15	0
9	Wednesday	2	16	2	48	16	2	2	51	3	23	16	4
10	Thursday..	3	16	3	39	17	10	3	51	4	14	17	10
11	Friday ..	4	1	4	23	19	7	4	36	4	58	19	5
12	Saturday..	4	44	5	2	20	10	5	19	5	37	20	7
13	Sunday ..	5	25	5	42	21	5	6	0	6	17	21	1
14	Monday..	6	0	6	20	22	2	6	35	6	55	21	10
15	Tuesday..	6	41	7	1	22	5	7	16	7	36	22	0
16	Wednesday	7	21	7	40	22	0	7	56	8	15	22	8
17	Thursday..	8	2	8	24	21	4	8	37	8	59	21	0
18	Friday ..	8	48	9	11	20	0	9	23	9	46	19	10
19	Saturday..	9	36	10	2	18	7	10	11	10	37	18	6
20	Sunday ..	10	31	11	2	16	11	11	6	11	37	17	0
21	Monday..	11	37	..	..	16	0	..	..	0	12	16	2
22	Tuesday..	0	18	1	3	16	4	0	52	1	38	16	6
23	Wednesday	1	45	2	23	17	9	2	20	2	58	17	9
24	Thursday..	2	54	3	23	19	2	3	29	3	58	19	1
25	Friday ..	3	52	4	17	20	4	4	27	4	54	20	2
26	Saturday..	4	42	5	2	21	3	5	17	5	37	20	11
27	Sunday ..	5	25	5	43	21	5	6	0	6	18	21	1
28	Monday..	6	1	6	19	21	6	6	36	6	54	21	2
29	Tuesday..	6	38	6	56	21	1	7	13	7	31	21	7
30	Wednesday	7	13	7	29	20	6	7	48	8	4	20	3
31	Thursday..	7	46	8	4	19	7	8	21	8	39	19	5

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 5th, 6h. 17m. p.m. | Last Quarter. 20th, 9h. 16m. a.m.
 Full Moon .. 13th, 1h. 24m. p.m. | New Moon .. 27th, 1h. 3m. p.m.

M. D.	W. D.	Newport.				Swansea.				Liverpool.				London.			
		Morn.		Even		Height		Morn.		Even.		Height		Morn.		Even.	
		H. M.	H. M.	H. M.	F. I.	H. M.	H. M.	H. M.	F. I.	H. M.	H. M.	H. M.	F. I.	H. M.	H. M.	H. M.	H. M.
1	Tu	9 5	9 21	29 5	8 5	8 23	22 7	0 59	1 17	3 54	4 11						
2	W	9 38	9 53	27 6	8 41	8 58	21 3	1 34	1 51	4 29	4 46						
3	Th	10 10	10 26	25 0	9 17	9 33	19 7	2 8	2 27	5 4	5 21						
4	Fri	10 42	10 59	22 7	9 54	10 13	17 10	2 44	3 6	5 40	5 58						
5	Sat	11 21	11 48	20 1	10 36	11 3	16 2	3 27	3 53	6 21	6 43						
6	Sun	..	0 18	18 3	11 28	..	14 10	4 25	5 0	7 10	7 42						
7	Mo	0 55	1 36	17 9	0 2	0 40	14 6	5 41	6 27	8 16	8 58						
8	Tu	2 18	2 57	19 0	1 23	2 6	15 4	7 11	7 49	9 39	10 20						
9	Wd	3 31	4 5	21 6	2 41	3 13	17 1	8 19	8 47	10 59	11 31						
10	Th	4 36	5 1	24 0	3 41	4 4	18 11	9 11	9 31	12 0	..						
11	Fri	5 25	5 47	27 1	4 26	4 48	20 11	9 50	10 7	0 25	0 45						
12	Sat	6 8	6 27	29 1	5 9	5 27	22 5	10 25	10 40	1 5	1 24						
13	Sun	6 49	7 6	30 1	5 50	6 7	23 0	11 1	11 17	1 42	1 58						
14	Mo	7 26	7 47	31 3	6 25	6 45	23 11	11 35	11 56	2 17	2 33						
15	Tu	8 7	8 27	31 6	7 6	7 26	24 2	..	0 17	2 51	3 11						
16	Wd	8 47	9 5	31 1	7 46	8 5	23 9	0 37	0 58	3 31	3 50						
17	Th	9 25	9 45	29 11	8 27	8 49	22 11	1 17	1 38	4 10	4 29						
18	Fri	10 7	10 28	27 10	9 13	9 36	21 5	1 59	2 23	4 50	5 12						
19	Sat	10 49	11 12	25 4	10 1	10 27	19 9	2 47	3 14	5 36	6 2						
20	Sun	11 41	..	22 8	10 56	11 27	17 11	3 42	4 17	6 30	6 59						
21	Mo	0 16	0 56	21 2	..	0 2	16 10	4 58	5 42	7 34	8 14						
22	Tu	1 40	2 22	21 10	0 43	1 28	17 3	6 32	7 14	8 59	9 43						
23	Wd	3 2	3 38	23 11	2 10	2 48	18 10	7 52	8 25	10 24	11 3						
24	Th	4 11	4 44	26 5	3 19	3 48	20 6	8 52	9 17	11 37	..						
25	Fri	5 15	5 40	28 4	4 17	4 44	21 10	9 41	10 2	0 5	0 31						
26	Sat	6 6	6 27	29 9	5 7	5 27	22 10	10 23	10 40	0 56	1 18						
27	Sun	6 49	7 7	30 1	5 50	6 8	23 0	11 1	11 18	1 40	1 58						
28	Mo	7 27	7 46	30 2	6 26	6 44	23 1	11 36	11 55	2 17	2 34						
29	Tu	8 4	8 22	29 7	7 3	7 21	22 8	..	0 14	2 52	3 10						
30	Wd	8 39	8 55	28 5	7 38	7 54	22 0	0 32	0 50	3 28	3 45						
31	Th	9 11	9 27	27 1	8 11	8 29	20 11	1 6	1 23	4 2	4 18						

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

H

PHASES OF THE MOON.

First Quarter. 4th, 2h. 27m. p.m. | Last Quarter. 18th, 5h. 5m. p.m.
 Full Moon .. 12th, 1h. 9m. a.m. | New Moon .. 26th, 5h. 11m. a.m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgewater.					Bristol.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H.	M.	H.	M.	F.	H.	M.	H.	M.	F.	H.	M.	H.	M.	F.
1	Friday ..	8	13	8	31	24 10	10	4	10	20	12 1	9	44	10	0	24 8
2	Saturday ..	8	49	9	9	23 9	10	36	10	54	10 9	10	16	10	34	22 9
3	Sunday ..	9	29	9	52	22 7	11	11	11	32	9 3	10	51	11	12	20 7
4	Monday..	10	18	10	45	21 8	11	58	..	8	0	11	38	..	18	10
5	Tuesday..	11	16	11	50	21 3	0	28	1	3	7 6	0	8	0	43	18 2
6	Wednesday ..	..	0	28	21	7	1	40	2	18	7 11	1	20	1	58	18 9
7	Thursday.	1	8	1	46	22 6	2	56	3	32	9 2	2	36	3	12	20 6
8	Friday ..	2	17	2	45	24 0	4	3	4	33	11 0	3	43	4	13	23 3
9	Saturday..	3	11	3	34	25 6	5	1	5	26	12 11	4	41	5	6	25 11
10	Sunday ..	3	58	4	20	26 9	5	51	6	14	14 6	5	31	5	54	28 2
11	Monday..	4	42	5	5	27 9	6	36	6	59	15 9	6	16	6	39	30 1
12	Tuesday..	5	26	5	47	28 1	7	21	7	43	16 2	7	1	7	23	30 8
13	Wednesday	6	9	6	31	28 7	8	6	8	27	16 9	7	46	8	7	31 6
14	Thursday.	6	55	7	16	28 4	8	51	9	12	16 5	8	31	8	52	31 0
15	Friday ..	7	39	8	3	27 9	9	34	9	55	15 9	9	14	9	35	30 1
16	Saturday..	8	29	8	54	26 8	10	19	10	41	14 4	9	59	10	21	28 1
17	Sunday ..	9	19	9	46	25 5	11	3	11	26	12 10	10	43	11	6	25 9
18	Monday..	10	14	10	40	24 1	11	54	..	11	2	11	34	..	23	4
19	Tuesday..	11	12	11	47	23 3	0	23	0	58	10 1	0	3	0	38	21 10
20	Wednesday	..	0	25	23	0	1	37	2	16	9 9	1	17	1	56	21 5
21	Thursday.	1	5	1	42	23 8	2	53	3	28	10 7	2	33	3	8	22 7
22	Friday ..	2	18	2	47	24 8	4	4	4	35	11 10	3	44	4	15	24 4
23	Saturday..	3	15	3	41	25 8	5	6	5	34	13 1	4	46	5	14	26 2
24	Sunday ..	4	6	4	29	26 3	5	59	6	23	13 10	5	39	6	3	27 4
25	Monday..	4	52	5	15	26 7	6	47	7	9	14 3	6	27	6	49	28 0
26	Tuesday..	5	33	5	51	26 7	7	27	7	47	14 3	7	7	7	27	28 0
27	Wednesday	6	8	6	27	26 6	8	5	8	23	14 2	7	45	8	3	27 10
28	Thursday.	6	44	7	0	26 3	8	40	9	56	13 10	8	20	8	36	27 4
29	Friday ..	7	16	7	33	25 9	9	12	9	28	13 3	8	52	9	8	26 4
30	Saturday ..	7	52	8	10	25 1	9	45	10	1	12 5	9	25	9	41	25 2

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 4th, 2h. 27m. p.m. | Last Quarter. 18th, 5h. 5m. p.m.
 Full Moon .. 12th, 1h. 9m. a.m. | New Moon .. 26th, 5h. 11m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.						Cardiff.						Gloucester.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	8	48	9	6	18	7	9	36	9	52	26	1	10	29	10	45	23	1
2	Saturday ..	9	24	9	44	17	3	10	8	10	26	24	5	11	1	11	19	21	0
3	Sunday ..	10	4	10	27	15	9	10	43	11	4	22	7	11	36	11	57	18	9
4	Monday ..	10	53	11	20	14	6	11	30	12	0	21	1	..	0	23	16	11	1
5	Tuesday ..	11	51	..	..	14	0	..	0	35	20	6	0	53	1	28	16	1	1
6	Wednesday ..	0	25	1	3	14	5	1	12	1	50	21	0	2	5	2	43	16	9
7	Thursday ..	1	43	2	21	15	8	2	28	3	4	22	6	3	21	3	57	18	7
8	Friday ..	2	52	3	20	17	6	3	35	4	5	24	10	4	28	4	58	21	6
9	Saturday ..	3	46	4	9	19	5	4	33	4	58	27	2	5	26	5	51	24	5
10	Sunday ..	4	33	5	55	21	0	5	23	5	46	29	3	6	16	6	39	26	11
11	Monday ..	5	17	5	40	22	3	6	8	6	31	30	9	7	1	7	24	28	11
12	Tuesday ..	6	1	6	22	22	8	6	53	7	15	31	3	7	46	8	8	29	7
13	Wednesday ..	6	44	7	6	23	3	7	38	7	59	31	11	8	31	8	52	30	5
14	Thursday ..	7	30	7	51	22	11	8	23	8	44	31	6	9	16	9	37	29	11
15	Friday ..	8	14	8	38	22	3	9	6	9	27	30	9	9	59	10	20	28	11
16	Saturday ..	9	4	9	29	20	10	9	51	10	13	29	0	10	44	11	6	26	9
17	Sunday ..	9	54	10	21	19	4	10	35	10	58	27	0	11	28	11	51	24	3
18	Monday ..	10	49	11	15	17	8	11	26	11	55	24	11	..	0	19	21	7	1
19	Tuesday ..	11	47	..	..	16	7	..	0	30	23	8	0	48	1	23	20	1	1
20	Wednesday ..	0	22	1	0	16	3	1	9	1	48	23	3	2	2	2	41	19	7
21	Thursday ..	1	40	2	17	17	1	2	25	3	0	24	3	3	18	3	53	20	10
22	Friday ..	2	53	3	22	18	4	3	36	4	7	25	10	4	29	5	0	22	9
23	Saturday ..	3	50	4	16	19	7	4	38	5	6	27	5	5	31	5	59	24	9
24	Sunday ..	4	41	5	4	20	4	5	31	5	55	28	4	6	24	6	48	25	11
25	Monday ..	5	27	5	50	20	9	6	19	6	41	28	11	7	12	7	34	26	7
26	Tuesday ..	6	8	6	26	20	9	6	59	7	19	28	11	7	52	8	12	26	7
27	Wednesday ..	6	43	7	2	20	8	7	37	7	55	28	9	8	30	8	48	26	5
28	Thursday ..	7	19	7	35	20	4	8	12	8	28	28	4	9	5	9	21	25	11
29	Friday ..	7	51	8	8	19	9	8	41	9	0	27	6	9	37	9	53	24	11
30	Saturday ..	8	27	8	45	18	11	9	17	9	34	26	6	10	10	10	26	23	7

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 4th, 2h. 27m. p.m. | Last Quarter. 18th, 5h. 5m. p.m.
 Full Moon .. 12th, 1h. 9m. a.m. | New Moon .. 26th, 5h. 11m. a.m.

M D	WEEK DAYS.	Ilfracombe.					Llanelly.					Milford Haven.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	8	23	8	41	18	5	8	58	9	16	18	11	8	58	9	16	18	4
2	Saturday..	8	59	9	19	17	3	9	34	9	54	17	9	9	34	9	54	17	3
3	Sunday ..	9	39	10	2	15	11	10	14	10	37	16	5	10	14	10	37	16	1
4	Monday..	10	28	10	55	14	10	11	3	11	30	15	4	11	3	11	30	15	2
5	Tuesday..	11	26	..	..	14	5	..	0	1	14	11	..	..	0	1	14	9	..
6	Wednesday	0	0	0	38	14	9	0	35	1	13	15	3	0	35	1	13	15	1
7	Thursday.	1	18	1	56	15	10	1	53	2	31	16	4	1	53	2	31	16	0
8	Friday ..	2	27	2	55	17	6	3	2	3	30	18	0	3	2	3	30	17	6
9	Saturday..	3	21	3	44	19	1	3	56	4	19	19	7	3	56	4	19	19	0
10	Sunday ..	4	8	4	30	20	6	4	43	5	5	21	0	4	43	5	5	20	3
11	Monday..	4	52	5	15	21	7	5	27	5	50	22	1	5	27	5	50	21	3
12	Tuesday..	5	36	5	57	21	11	6	11	6	32	22	5	6	11	6	32	21	7
13	Wednesday	6	19	6	41	22	6	6	54	7	16	23	0	6	54	7	16	22	1
14	Thursday.	7	5	7	26	22	2	7	40	8	1	22	8	7	40	8	1	21	10
15	Friday ..	7	49	8	13	21	7	8	24	8	48	22	1	8	24	8	48	21	3
16	Saturday..	8	39	9	4	20	4	9	14	9	39	20	10	9	14	9	39	20	2
17	Sunday ..	9	29	9	56	19	0	10	4	10	31	19	6	10	4	10	31	18	11
18	Monday..	10	24	10	50	17	7	10	59	11	25	18	1	10	59	11	25	17	7
19	Tuesday..	11	22	11	57	16	8	11	57	..	17	2	11	57	..	16	8	..	..
20	Wednesday	..	0	0	35	16	4	0	32	1	10	16	10	0	32	1	10	16	6
21	Thursday	1	15	1	52	17	1	1	50	2	27	17	7	1	50	2	27	17	2
22	Friday ..	2	28	2	57	18	2	3	3	3	32	18	8	3	3	3	32	18	2
23	Saturday.	3	25	3	51	19	3	4	0	4	26	19	9	4	0	4	26	19	2
24	Sunday ..	4	16	4	39	19	11	4	51	5	14	20	5	4	51	5	14	19	9
25	Monday..	5	2	5	25	20	3	5	37	6	0	20	9	5	37	6	0	20	1
26	Tuesday..	5	43	6	1	20	3	6	18	6	36	20	9	6	18	6	36	20	1
27	Wednesday	6	18	6	37	20	2	6	53	7	12	20	8	6	53	7	12	20	0
28	Thursday.	6	54	7	10	19	11	7	29	7	45	20	5	7	29	7	45	19	9
29	Friday ..	7	26	7	43	19	5	8	1	8	18	19	11	8	1	8	18	19	3
30	Saturday..	8	2	8	20	18	8	8	37	8	55	19	2	8	37	8	55	18	7

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

1st Quarter. 4th, 2h. 27m. p.m. | Last Quarter. 18th, 5h. 5m. p.m.
 Full Moon .. 12th, 1h. 9m. a.m. | New Moon .. 26th, 5h. 11m. a.m.

	Newport.				Swansea.				Liverpool.				London.			
	Morn.		Even		Height		Morn.		Even.		Height		Morn.		Even.	
	H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.
Fri	9 44	10 0	25 0	0	8 48	9 6	19 7	7	1 40	1 58	4 35	4 52	4 35	4 52		
Sat	10 16	10 34	23 1	1	9 24	9 44	18 3	3	2 16	2 34	5 11	5 29	5 11	5 29		
Sun	10 51	11 12	21 0	0	10 4	10 27	16 9	9	2 55	3 17	5 48	6 10	5 48	6 10		
Mo	11 38	..	19 3	3	10 53	11 20	15 6	6	3 42	4 13	6 33	6 59	6 33	6 59		
Tu	0 8	0 43	18 7	7	11 51	..	15 0	0	4 49	5 27	7 30	8 5	7 30	8 5		
Wd	1 20	1 58	19 2	2	0 25	1 3	15 5	5	6 10	6 51	8 44	9 24	8 44	9 24		
Th	2 36	3 12	20 11	11	1 43	2 21	16 8	8	7 29	8 2	10 1	10 38	10 1	10 38		
Fri	3 43	4 13	23 6	6	2 52	3 20	18 6	6	8 29	8 53	11 13	11 41	11 13	11 41		
Sat	4 41	5 6	26 3	3	3 46	4 9	20 5	5	9 15	9 34	..	0 6	..	0 6		
Sun	5 31	5 54	28 5	5	4 33	5 55	22 0	0	9 54	10 13	0 29	0 49	0 29	0 49		
Mo	6 16	6 39	30 4	4	5 17	5 40	23 3	3	10 31	10 52	1 10	1 30	1 10	1 30		
Tu	7 1	7 23	30 11	11	6 1	6 22	23 8	8	11 12	11 32	1 49	2 9	1 49	2 9		
Wd	7 46	8 7	31 8	8	6 44	7 6	24 3	3	11 55	..	2 28	2 48	2 28	2 48		
Th	8 31	8 52	31 3	3	7 30	7 51	23 11	11	0 17	0 41	3 10	3 31	3 10	3 31		
Fri	9 14	9 35	30 4	4	8 14	8 38	23 3	3	1 3	1 26	3 54	4 15	3 54	4 15		
Sat	9 59	10 21	28 4	4	9 4	9 29	21 10	10	1 49	2 14	4 38	5 1	4 38	5 1		
Sun	10 43	11 6	26 1	1	9 54	10 21	20 4	4	2 4	3 6	5 27	5 54	5 27	5 54		
Mo	11 34	..	23 8	8	10 49	11 15	18 8	8	3 35	4 8	6 22	6 52	6 22	6 52		
Tu	0 3	0 38	22 3	3	11 47	..	17 7	7	4 42	5 23	7 25	7 59	7 25	7 59		
Wd	1 17	1 56	21 10	10	0 22	1 0	17 3	3	6 6	6 49	8 39	9 21	8 39	9 21		
Th	2 33	3 8	22 11	11	1 40	2 17	18 1	1	7 26	7 56	9 59	10 35	9 59	10 35		
Fri	3 44	4 15	24 9	9	2 53	3 22	19 4	4	8 29	8 55	11 9	11 42	11 9	11 42		
Sat	4 46	5 14	26 7	7	3 50	4 16	20 7	7	9 19	9 40	..	0 8	..	0 8		
Sun	5 39	6 3	27 8	8	4 41	5 4	21 4	4	10 1	10 21	0 33	0 55	0 33	0 55		
Mo	6 27	6 49	28 3	3	5 27	5 50	21 9	9	10 40	11 1	1 17	1 38	1 17	1 38		
Tu	7 7	7 27	28 3	3	6 8	6 26	21 9	9	11 18	11 36	1 58	2 17	1 58	2 17		
Wd	7 45	8 3	28 1	1	6 43	7 2	21 8	8	11 54	..	2 34	2 52	2 34	2 52		
Th	8 20	8 36	27 8	8	7 19	7 35	21 4	4	0 13	0 30	3 9	3 27	3 9	3 27		
Fri	8 52	9 8	26 9	9	7 51	8 8	20 9	9	0 46	1 3	3 43	3 59	3 43	3 59		
Sat	9 25	9 41	25 6	6	8 27	8 45	19 11	11	1 20	1 38	4 15	4 32	4 15	4 32		

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 4th, 10h. 20m. a.m. | Last Quarter. 18th, 3h. 34m. a.m.
 Full Moon .. 11th, 12h. 9m. p.m. | New Moon .. 25th, 1h. 39m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height.		Morn.		Even.		Height.	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Sunday ..	8	29	8	48	24	4	10	19	10	36	11	5
2	Monday ..	9	6	9	25	23	7	10	52	11	8	10	6
3	Tuesday ..	9	47	10	9	22	10	11	28	11	49	9	7
4	Wednesday ..	10	32	11	0	22	3	..	0	14	8	10	11
5	Thursday ..	11	28	..	..	22	1	0	45	1	17	8	8
6	Friday ..	0	2	0	37	22	8	1	53	2	27	9	4
7	Saturday ..	1	12	1	46	23	7	3	0	3	32	10	6
8	Sunday ..	2	19	2	49	24	11	4	5	4	38	12	2
9	Monday ..	3	16	3	43	26	3	5	7	5	36	13	10
10	Tuesday ..	4	11	4	36	27	5	6	5	6	30	15	3
11	Wednesday ..	5	4	5	31	27	11	6	58	7	25	15	11
12	Thursday ..	5	53	6	18	28	6	7	49	8	14	16	8
13	Friday ..	6	43	7	8	28	7	8	39	9	4	16	9
14	Saturday ..	7	32	7	57	28	1	9	27	9	50	16	2
15	Sunday ..	8	21	8	49	27	4	10	14	10	36	15	2
16	Monday ..	9	11	9	35	26	2	10	56	11	17	13	9
17	Tuesday ..	9	59	10	23	25	1	11	38	..	12	5	11
18	Wednesday ..	10	47	11	15	23	10	0	3	0	31	10	10
19	Thursday ..	11	44	..	..	23	0	1	2	1	34	9	9
20	Friday ..	0	18	0	58	22	11	2	10	2	47	9	8
21	Saturday ..	1	36	2	9	23	4	3	23	3	55	10	2
22	Sunday ..	2	42	3	13	24	2	4	30	5	4	11	3
23	Monday ..	3	37	4	2	24	10	5	30	5	56	12	1
24	Tuesday ..	4	29	4	51	25	4	6	23	6	45	12	8
25	Wednesday ..	5	13	5	34	25	6	7	8	7	28	12	11
26	Thursday ..	5	52	6	9	25	9	7	48	8	6	13	3
27	Friday ..	6	28	6	45	25	11	8	24	8	41	13	5
28	Saturday ..	7	2	7	19	25	10	8	58	9	15	13	4
29	Sunday ..	7	31	7	52	25	6	9	29	9	45	12	11
30	Monday ..	8	9	8	28	25	2	10	1	10	18	12	6
31	Tuesday ..	8	46	9	4	24	8	10	34	10	50	11	10

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m — Bridgewater, *sub.* 12m. — Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter 4th, 10h. 20m. a.m. | Last Quarter. 18th, 3h. 34m. a.m.
 Full Moon .. 11th, 12h. 9m. p.m. | New Moon .. 26th, 11h. 39m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.					Cardiff.					Gloucester.				
		Morn.	Even.	Height			Morn.	Even.	Height			Morn.	Even.	Height		
		H. M.	H. M.	F. I.			H. M.	H. M.	F. I.			H. M.	H. M.	F. I.		
1	Sunday ..	9 4	9 23	17 11			9 51	10 8	25 3			10 44	11 1	22 1		
2	Monday ..	9 41	10 0	17 0			10 24	10 40	24 2			11 17	11 33	20 8		
3	Tuesday ..	10 22	10 44	16 1			11 0	10 21	23 0			11 53	..	19 3		
4	Wednesday	11 7	11 35	15 4			11 46	..	22 1			0 14	0 39	18 2		
5	Thursday ..	..	0 3	15 2			0 17	0 49	21 10			1 10	1 42	17 9		
6	Friday ..	0 37	1 12	15 10			1 25	1 59	22 9			2 18	2 52	18 11		
7	Saturday ..	1 47	2 21	17 0			2 32	3 4	24 2			3 25	3 57	20 8		
8	Sunday ..	2 54	3 24	18 8			3 37	4 10	26 3			4 30	5 3	23 4		
9	Monday ..	3 51	4 18	20 4			4 39	5 8	28 4			5 32	6 1	25 11		
10	Tuesday ..	4 46	5 11	21 10			5 37	6 2	30 2			6 30	6 55	28 3		
11	Wednesday	5 39	6 6	22 5			6 30	6 57	31 0			7 23	7 50	29 3		
12	Thursday	6 28	6 53	23 2			7 21	7 46	31 9			8 14	8 39	30 8		
13	Friday ..	7 18	7 43	23 3			8 11	8 36	31 11			9 4	9 29	30 5		
14	Saturday ..	8 7	8 32	22 8			8 59	9 22	31 3			9 52	10 15	29 7		
15	Sunday ..	8 59	9 24	21 8			9 46	10 8	30 0			10 39	11 1	28 1		
16	Monday ..	9 46	10 10	20 3			10 28	10 49	28 3			11 21	11 42	26 9		
17	Tuesday ..	10 34	10 58	18 11			11 10	11 35	26 6			..	0 3	23 7		
18	Wednesday	11 22	11 50	17 4			..	0 3	24 6			0 28	0 56	21 2		
19	Thursday ..	..	0 19	16 3			0 34	1 6	23 3			1 27	1 59	19 7		
20	Friday ..	0 53	1 33	16 2			1 42	2 19	23 2			2 35	3 12	19 5		
21	Saturday ..	2 11	2 44	16 8			2 55	3 27	23 9			3 48	4 20	20 3		
22	Sunday ..	3 17	3 48	17 9			4 2	4 36	25 0			4 55	5 29	21 9		
23	Monday ..	4 12	4 37	18 7			5 2	5 28	26 1			5 55	6 21	23 1		
24	Tuesday ..	5 4	5 26	19 2			5 55	6 17	26 11			6 48	7 10	24 1		
25	Wednesday	5 48	6 9	19 5			6 40	7 0	27 2			7 33	7 53	24 5		
26	Thursday ..	6 27	6 44	19 9			7 20	7 38	27 6			8 13	8 31	24 11		
27	Friday ..	7 3	7 20	19 11			7 56	8 13	27 10			8 49	9 6	25 3		
28	Saturday ..	7 37	7 54	19 10			8 30	8 47	27 8			9 23	9 40	25 1		
29	Sunday ..	8 9	8 27	19 4			9 1	9 17	27 2			9 54	10 10	24 5		
30	Monday ..	8 44	9 3	19 0			9 33	9 50	26 7			10 26	10 43	23 9		
31	Tuesday ..	9 21	9 39	18 4			10 6	10 22	25 10			10 59	11 15	22 9		

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 4th, 10h. 20m. a.m. | Last Quarter.. 18th, 3h. 34m. a.m.
 Full Moon .. 11th, 12h. 9m. p.m. | New Moon .. 25th, 11h. 39m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Sunday ..	8	39	8	58	17	10	9	14	9	33	18	4
2	Monday..	9	16	9	36	17	0	9	51	10	10	17	6
3	Tuesday..	9	57	10	20	16	2	10	32	10	54	16	8
4	Wednesday	10	43	11	10	15	7	11	17	11	45	16	1
5	Thursday..	11	38	..	15	5		..	0	13	15	11	
6	Friday ..	0	12	0	47	16	0	0	47	1	22	16	6
7	Saturday..	1	22	1	56	17	0	1	57	2	31	17	6
8	Sunday ..	2	29	2	59	18	6	3	4	3	34	19	0
9	Monday..	3	26	3	53	19	11	4	1	4	28	20	5
10	Tuesday..	4	21	4	46	21	3	4	56	5	21	21	9
11	Wednesday	5	14	5	41	21	9	5	49	6	16	22	8
12	Thursday..	6	3	6	28	22	5	6	38	7	3	22	11
13	Friday ..	6	53	7	18	22	6	7	28	7	53	23	0
14	Saturday..	7	42	8	7	21	11	8	17	8	42	22	5
15	Sunday ..	8	34	8	59	21	1	9	9	9	34	21	7
16	Monday..	9	21	9	45	19	10	9	56	10	20	20	4
17	Tuesday..	10	9	10	34	18	8	10	44	11	8	19	2
18	Wednesday	10	57	11	25	17	4	11	32	12	0	17	10
19	Thursday..	11	54	..	16	4		..	0	29	16	10	
20	Friday ..	0	28	1	8	16	3	1	3	1	43	16	9
21	Saturday..	1	46	2	19	16	9	2	21	2	54	17	3
22	Sunday ..	2	52	3	23	17	8	3	27	3	58	18	2
23	Monday..	3	47	4	12	18	5	4	22	4	47	18	11
24	Tuesday..	4	39	5	1	18	11	5	14	5	36	19	5
25	Wednesday	5	23	5	44	19	1	5	58	6	19	19	7
26	Thursday..	6	2	6	19	19	5	6	37	6	54	19	11
27	Friday ..	6	38	6	55	19	7	7	13	7	30	20	1
28	Saturday .	7	12	7	29	19	6	7	47	8	4	20	0
29	Sunday ..	7	44	8	2	19	1	8	19	8	37	19	7
30	Monday..	8	19	8	38	18	9	8	54	9	13	19	3
31	Tuesday..	8	56	9	14	18	2	9	31	9	49	18	8

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub* 16m.—Llanelly, *sub* 16m.—Milford Haven, *sub* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter 4th, 10h. 20m. a.m. | Last Quarter. 18th, 3h. 34m. a.m.
 Full Moon .. 11th, 12h. 9m. p.m. | New Moon .. 25th, 11h. 39m. p.m.

M. D.	W. D.	Newport.						Swansea.						Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Morn.		Even.	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.	H.	M.
1	Sun	9	59	10	16	24	0	9	4	9	23	18	11	1	55	2	14	4	50	5	8
2	Mo	10	32	10	48	22	10	9	41	10	0	18	0	2	34	2	52	5	27	5	47
3	Tu	11	8	11	29	21	6	10	22	10	44	17	1	3	13	3	37	6	7	6	29
4	Wd	11	54	..	..	20	5	11	7	11	35	16	4	4	3	4	32	6	54	7	20
5	Th	0	25	0	57	20	1	..	0	3	16	2	5	8	5	43	7	49	8	24	
6	Fri	1	33	2	7	21	2	0	37	1	12	16	10	6	24	7	0	9	0	9	36
7	Sat	2	40	3	12	22	10	1	47	2	21	18	0	7	33	8	2	10	10	10	42
8	Sun	3	45	4	18	25	2	2	54	3	24	19	8	8	30	8	57	11	13	11	43
9	Mo	4	47	5	16	27	8	3	51	4	18	21	4	9	20	9	42	..	0	10	10
10	Tu	5	45	6	10	29	9	4	46	5	11	22	10	10	6	10	26	0	34	0	57
11	Wd	6	38	7	5	30	8	5	39	6	6	23	5	10	51	11	16	1	22	1	44
12	Th	7	29	7	54	31	6	6	28	6	53	24	2	11	39	..	..	2	8	2	32
13	Fri	8	19	8	44	31	8	7	18	7	43	24	3	0	4	0	29	2	54	3	18
14	Sat	9	7	9	30	30	11	8	7	8	32	23	8	0	55	1	19	3	42	4	7
15	Sun	9	54	10	16	29	7	8	59	9	24	22	8	1	43	2	9	4	31	4	55
16	Mo	10	36	10	57	27	6	9	46	10	10	21	3	2	34	2	58	5	22	5	48
17	Tu	11	18	11	43	25	6	10	34	10	58	19	11	3	24	3	50	6	13	6	40
18	Wd	..	0	11	23	2	2	11	22	11	50	18	4	4	20	4	52	7	7	7	37
19	Th	0	42	1	14	21	10	..	0	19	17	3	5	26	6	3	8	8	8	43	43
20	Fri	1	50	2	27	21	8	0	53	1	33	17	2	6	43	7	20	9	18	9	53
21	Sat	3	3	3	35	22	5	2	11	2	44	17	8	7	53	8	22	10	29	11	4
22	Sun	4	10	4	44	23	9	3	17	3	48	18	9	8	51	9	17	11	34	..	..
23	Mo	5	10	5	36	25	0	4	12	4	37	19	7	9	37	9	58	0	4	0	31
24	Tu	6	3	6	25	26	0	5	4	5	26	20	2	10	21	10	39	0	52	1	14
25	Wd	6	48	7	8	26	3	5	48	6	9	20	5	11	0	11	19	1	38	1	57
26	Th	7	28	7	46	26	9	6	27	6	44	20	9	11	38	11	55	2	16	2	35
27	Fri	8	4	8	21	27	1	7	3	7	20	20	11	..	0	14	2	53	3	10	10
28	Sat	8	38	8	55	26	11	7	37	7	54	20	10	0	31	0	49	3	28	3	44
29	Sun	9	9	9	25	26	3	8	9	8	27	20	5	1	6	1	22	4	1	4	18
30	Mo	9	41	9	58	25	8	8	44	9	3	20	0	1	38	1	54	4	33	4	50
31	Tu	10	14	10	30	24	9	9	21	9	39	19	4	2	13	2	32	5	7	5	26

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PORT CHARGES, &c.

APPLEDORE.

Mooring, 1s.

Pilotage, as per agreement.

BARNSTAPLE.

Keelage, 4d. per ton register.

Pilotage, as per agreement.

BIDEFORD.

Harbour Dues.—Vessels discharging at public quay, $\frac{1}{4}$ d. per ton register; at private wharf, 2s. 6d. Pilotage, as per agreement.

BRIDGEWATER.

Pilotage.

From the extreme limits of the navigation in the Bristol Channel, or from any point between such extreme limits and Burnham Church, to the Town or to any point between the Black Rock and the Town, the vessel being safely moored; also from the Town to the limits of the navigation, or to any point between Burnham Church and the said limits, the following Rates, viz:—

				£	s.	d.
On vessels of 30 tons and under				0	6	6
On vessels above 30 tons and under 50 tons.				0	8	0
"	50	"	65	0	10	0
"	65	"	80	0	12	6
"	80	"	100	0	15	0
"	100	"	120	1	0	0
"	120	"	150	1	11	0
"	150	"	200	2	11	0
"	200	"	300	3	6	0
"	300	"	.....	4	1	0

Bridgewater, continued.

From Burnham Church, or from any point between Burnham Church and the Town, to the Town, or to any intermediate point, the vessel being safely moored, and *vice versa*.

		£	s.	d.
On vessels of 30 tons and under		0	4	6
On vessels above 30 tons and under 50 tons.		0	5	6
" 50	65	0	6	6
" 65	80	0	7	6
" 80	100	0	8	6
" 100	120	0	10	6
" 120	150	1	6	0
" 150	200	2	1	0
" 200	300	2	11	0
" 300	.....	3	4	0

The above Rates are subject to a reduction of one-fourth part in respect of vessels towed by steam vessels.

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first-mentioned ships shall, by any order of Her Majesty's Most Honourable Privy Council be privileged to enter the ports of this kingdom, upon paying the same Dues of Tonnage as are paid by British ships; in which case, such ships and vessels not having British registers, shall pay the like Rates of Pilotage only, as are payable by ships having British registers.

If a master chose to employ a pilot for a tide in the navigation, the pilot shall be entitled to receive for such service, two shillings and sixpence for each tide.

Towage.

	Vessels under 10ft. draft water per ton register.	Vessels under 11ft. draft water per ton register.	Vessels under 12ft. draft water per ton register.	Vessels above 12ft. draft water per ton register.
	s. d.	s. d.	s. d.	s. d.
To or from Burnham, Black Rock, or any intermediate place, to or from Bridge- water, one tide's work	0 3	0 4	0 5	0 6
To or from Burnham to Black Rock, Dunball, or Cumb- wich, one tide's work	0 1½	0 2	0 3	0 3
To or from Burnham and Highbridge, one tide's work	0 2	0 4	0 5	0 6

Harbour Dues.

One penny per ton register, with 1s. fee for moorage.

*Bridgewater, continued.***Tonnage Rates.**

First Class.—Vessels entering with cargoes or departing with cargoes—
s. d.

INWARDS. —For every ship or other vessel which shall enter the said basin, from any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney, and Sark—per ton measurement ..	0	3
From any other part of Europe except places within the Straits of Gibraltar, and round the North Cape, and from all British Colonies—per ton measurement ..	0	4
From any port or place in Europe round the North Cape, any port or place within the Straits of Gibraltar whether in Europe, Asia, or Africa, and any port or place in the United States of America—per ton measurement	0	6
From any port or place in any other part of the world—per ton measurement	0	8

OUTWARDS. —For every ship or vessel which shall depart from the said basin to any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney, and Sark,—per ton measurement	1	0
To any other port of Europe except places within the Straits of Gibraltar, and round the North Cape, or to any British Colony,—per ton measurement	0	4
To any port or place in Europe round the North Cape, any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa; any port or place in the United States of America,—per ton measurement ..	0	6
To any port or place in any part of the world—per ton measurement	0	8

Second Class.—Vessels entering without cargoes or in ballast
For every ship or other vessel which shall enter into the said basin—per ton measurement

0 2

Third Class.—For every ship or other vessel with a cargo which shall enter the said basin and depart therefrom without breaking bulk, or which shall discharge and afterwards take on board and depart with the same cargo—per ton measurement

0 4

And in estimating the dues contained in the schedule, every vessel of less burthen than twenty tons measurement, shall be rated at twenty tons measurement

Extra basin dues for overtime—For every coal vessel remaining in the basin beyond ten days, for every coasting vessel beyond fourteen days, and for every foreign vessel beyond thirty days from the time of their respectively entering the same—per ton measurement, per month..

0 2

BRISTOL.

Rates or Fares for Pilotage.

	If 80 and under 100 tons.		If 100 and under 200 tons.		If 200 and under 300 tons.		If 300 and under 500 tons.		If 500 and under 600 tons.		If 600 and under 800 tons.		If 800 and under 1000 tons.		If 1000 tons and upwards.	
	£.	s. d.	£.	s.	£.	s.	£.	s.	£.	s.	£.	s.	£.	s.	£.	s.
BETWEEN																
Lundy and Coombe	1	1 0	1	8	1	15	0	2	2	2	16	3	3 0	3	10	
Lundy and Swansea or Minehead	2	2 0	2	16	3	10	0	4	4	4	18	6	6 0	7	0	
Lundy and Bridgewater, Cardiff, or the Holmes	2	12 6	3	10	4	7 6	5	5 6	2	6	7 0	7	17 6	8	15	
Lundy and Newport or Kingroad	3	3 0	4	4	5	5 0	6	6 7	7	0	8 8	9	9 0	10	10	
Coombe and Minehead	1	1 0	1	8	1	15	0	2	2	2	16	3	3 0	3	10	
Coombe and Bridgewater, Cardiff, or the Holmes	1	11 6	2	2	2	12 6	3	3 13	6	4	4	4	14 6	5	5	
Coombe and Newport or Kingroad	2	2 0	2	16	3	10	0	4	4	4	18	6	6 0	7	0	
Minehead and Bridgewater, Cardiff, or the Holmes	0	10 6	0	14	0	17 6	1	1 4	6	1	1 8	1	11 6	1	15	
Minehead and Newport or Kingroad ..	1	1 0	1	8	1	15	0	2	2	2	16	3	3 0	3	10	
Between any of the following places:— Portishead, Kingroad, Hungroad, Broad Pill, Cumberland or Bathurst Basins, and any other of such places*	0	10 0	0	15	1	0 0	1	5 1	10	0	1 15	2	0 0	2	5	
Between any two of the following places, viz:—Bridgewater, Cardiff, the Holmes, Newport and Kingroad	0	10 6	0	14	0	17 6	1	1 4	6	1	1 8	1	11 6	1	15	

* If under 80 tons, 7s. 6d.

Bristol, continued.

Harbour Dues.		£	s.	d.
For every vessel trading from Africa, Honduras, Surinam, and other ports in South America, the United States of America, the East and West Indies, all the ports within the Straits of Gibraltar, the Southern Whale Fishery, the British Colonies, Portugal, Prussia, Russia, Spain, without the Straits, and Sweden—per ton				
		0	1	2
For every vessel trading from Flanders, France, without the Straits, Germany, Guernsey, Holland, Jersey, Norway, Poland, and Zealand—per ton				
		0	0	7
For every vessel trading from Ireland, the Isle of Man, Scotland, or as a Coaster, not including vessels from Cardiff, Newport, and other ports to the Eastward of the Holmes—per ton				
		0	0	5
For every vessel from Cardiff, Newport, or any other port to the Eastward of the Holmes (not being vessels one-third part of the lading of which shall consist of coal, scroff, iron, tin, tin plates, grain, copper, bricks, stone-coal, tar, slate, bark, timber, or wood,) as follows:—				
If such vessel shall be under forty tons burthen—for each voyage				
		0	7	6
If such vessel shall be forty tons burthen, and under seventy-five tons—for each voyage				
		0	12	6
If such vessel shall be seventy-five tons burthen, and under one hundred tons—for each voyage				
		0	16	0
If such vessel shall be one hundred tons burthen or upwards—for each voyage				
		1	1	0
For every vessel from Cardiff, Newport, or any other port to the Eastward of the Holmes, one-third part of the lading of which shall consist of coal, scroff, iron, tin, tin plates, grain, copper, bricks, stone-coal, tar, slate, bark, timber, or wood, as follows:—				
If such vessel shall not exceed seventy-five tons burthen—for each voyage				
		0	5	0
If such vessel shall exceed seventy-five tons burthen—for each voyage				
		0	7	6
N.B.—There are no Dock Rates or other Port Charges payable on vessels leaving the Port of Bristol.				

BRITON-FERRY.**Pilotage.**

From outside of Neath Bar.

Vessels under 40 tons register	7s.	0d.
Vessels over 40 and under 60 tons register	10s.	0d.
With or without Steam.		

Briton-Ferry, continued.

For vessels over 60 tons register the rates are as follows;—

Draught of Water.	Without Steam.	With Steam.	Draught of Water.	Without Steam.	With Steam.
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
8 feet..	0 11 3	0 8 5	13½ ft. ..	1 2 6	0 16 11
8½ „ ..	0 12 0	0 9 0	14 „ ..	1 8 0	1 1 0
9 „ ..	0 12 6	0 9 5	14½ „ ..	1 13 6	1 5 2
9½ „ ..	0 13 0	0 9 9	15 „ ..	2 1 6	1 11 2
10 „ ..	0 13 6	0 10 2	15½ „ ..	2 10 6	1 18 0
10½ „ ..	0 14 0	0 10 6	16 „ ..	3 1 0	2 5 9
11 „ ..	0 14 6	0 10 11	16½ „ ..	3 12 0	2 14 0
11½ „ ..	0 15 9	0 11 10	17 „ ..	4 5 6	3 4 2
12 „ ..	0 16 10	0 12 8	17½ „ ..	4 19 0	3 14 3
12½ „ ..	0 18 6	0 14 2	18 „ ..	5 13 0	4 5 0
13 „ ..	1 0 6	0 15 5	And 10s. for every ½ ft. over 18 ft.		

Towage.

Under 150 tons register.....	Inwards.....	1½d. per ton register
„ 150 „	Outwards	2d. „
Over 150 in and out		2d. „

Harbour Dues.

Coastwise or Foreign	1½d. per ton register
Layage	1s. 6d. each vessel

Loading Charges.

Trimming coal, on cargo	2½d. per ton
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Discharging Ballast.

Without reference to quantity—about 1½d. per ton on cargo.

BURRY PORT.**Harbour Dues.**

For every ship, barge, boat, or other vessel coming into or going out of the harbour of Burry Port, according to its tonnage, the sum of fourpence per ton.

For every ship, barge, boat, or other vessel running into the inner harbour by stress of weather, and not unloading, the sum of sixpence per ton, and the outer harbour, the sum of fourpence per ton.

Burry Port, continued.

For every ship, barge, boat, or other vessel coming into the inner harbour from stress of weather, and lying longer than seven days, the sum of threepence per ton per day, and into the outer harbour the sum of twopence per ton per day.

N.B.—In cases of vessels bona fide seeking freight, the Superintendent being satisfied thereof, is authorised to remit the dues to 1s. each

Stemming Rates.

Vessels not exceeding 20 tons register, 6d.; 50 tons, 1s.: 70 tons, 1s. 6d.; 100 tons, 2s.; exceeding 100 tons, 2s. 6d.

Ballast.

For wheeling, per ton register, Outer Harbour, 1d.; Inner Harbour, 1½d.

For use of planks, barrows, and wagons—

	s.	d.		s.	d.
Not above 100 tons register	1	6	Not above 350 tons register	3	6
„ 150 „	2	0	„ 400 „	4	0
„ 200 „	2	6	Above 400 „	4	6
„ 300 „	3	0			

Men to be allowed 1s. for assisting to trip the basket, and the same extra charge for the use of crane and tubs, if required.

For Pilotage, see Llanely.

BURNHAM.

Harbour Dues, 2d. per ton register. Beacons, 4s. per vessel.

Tolls, on coasting vessels, similar to those at Bridgewater;
on Foreign trade vessels 3d. per ton extra.

Pilotage, as per agreement.

CARDIFF.**Pilotage Rates.**

The limit of this Pilotage is the Port of Cardiff and that portion of the Bristol Channel which lies eastward of Lundy Island, up to and including Kingroad and the River Rhymney to Rhymney Bridge. This Pilotage is not compulsory but may be obtained over all or any portion of this district, at the discretion of the Masters of Vessels.

Harbour Pilotage.—Every licensed pilot employed in taking a ship or vessel between any dock or harbour in the port of Cardiff and any point in Cardiff Roads, or *vice versa*, shall be paid according to the registered tonnage of such vessel, as follows:—

Cardiff, continued.

FOR LADEN VESSELS.				£	s.	d.
If under 60 tons				0	5	0
60 tons and under 100 tons				0	7	6
100	"	150 tons	....	0	10	0
150	"	200 tons	....	0	12	6
200	"	250 tons	....	0	15	0
250	"	300 tons	....	0	17	6
300	"	400 tons	....	1	1	0
400	"	500 tons	....	1	5	0
500	"	600 tons	....	1	7	6
600	"	800 tons	....	1	10	0
800	"	1000 tons	....	1	15	0
1000	"	1250 tons	....	2	10	0
1250 tons and upwards				3	0	0

For all vessels in ballast, the charges to be one-fifth less than the above rates.

Channel Pilotage.—Any ship or vessel sailing to and from the port of Cardiff, upon or in the waters of the Bristol Channel between Lundy Island and Kingroad, for which the services of a duly licensed pilot may be required and rendered, shall pay according to the registered tonnage of such vessel, as follows:—

FOR LADEN VESSELS.

				1st Limit.			2nd Limit.			3rd Limit.		
				£	s.	d.	£	s.	d.	£	s.	d.
If under 150 tons				0	15	0	1	5	0	2	0	0
150 tons and under 200 tons				0	17	6	1	10	0	2	7	6
200	"	300 tons	....	1	0	0	1	17	6	2	17	6
300	"	400 tons	....	1	5	0	2	5	0	3	5	0
400	"	500 tons	....	1	7	6	2	10	0	3	10	0
500	"	600 tons	....	1	10	0	2	15	0	4	0	0
600	"	800 tons	....	1	15	0	3	0	0	4	7	6
800	"	1000 tons	....	2	0	0	3	15	0	5	10	0
1000	"	1250 tons	....	2	10	0	4	15	0	7	0	0
1250 tons and upwards				3	0	0	5	15	0	8	10	0

For all vessels in ballast, the charges to be one-fifth less than the above rates.

FIRST LIMIT.—Between Cardiff Roads and Nash or Kingroad, or any point east of Nash, and west of Kingroad.

SECOND LIMIT.—Between Cardiff Roads and Combe, or any point west of Nash and east of Combe.

THIRD LIMIT.—Between Cardiff Roads and Lundy Island, or any point west of Combe.

Any Pilot who may be required to remain on board any ship or vessel for the convenience of the captain, master, owner, or agent, after he shall have discharged the duties for which he was engaged, shall be paid ten shillings per day for every day he may be employed,

Cardiff, continued.

and any Pilot who may be required to move any ship or vessel from one dock or tidal harbour to another dock or tidal harbour, occupying only one tide, shall be paid for every ship

	s.	d.
Not exceeding 100 tons register.....	5	0
100 and not exceeding 300	10	0
300	12	6
500	17	6
800 and upwards	25	0

Towage.

Inwards, in ballast	1½d. per ton register
„ with cargo	2d. „
Outwards „	2d. per ton

Town Dues.

Under 60 tons register	2s. 6d. per vessel
Above 60 tons register	5s. 0d. „

Loading Charges.

Trimming coal (single deck)	2½d. per ton cargo
„ (double deck)	3d. „
Wharfage on cargo	2d. „

Discharging Ballast.

Vessels under 200 tons.....	5d. per ton on quantity
200 tons and under 400 tons	6d. „
400	7d. „
600	8d. „
800 and upwards	9d. „

Tonnage Rates.—Bute Docks.

FIRST CLASS. —On all sailing, steam, or other vessels entering from or departing for any port in the United Kingdom, Isle of Man, Jersey, Guernsey, Alderney, and Sark, under 100 tons register	s.	d.
100 tons and under 200 tons register.....	per register ton	0 1½
200 tons register and upwards (except steam vessels) ditto	ditto	0 2
Steam vessels 200 tons register and upwards	ditto	0 3

SECOND CLASS. —On all sailing, steam, or other vessels entering from or departing for any port in Europe, between the North Cape and Cape Finisterre,	per register ton	0 5
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THIRD CLASS. —On all sailing, steam, or other vessels entering from or departing for any other port in Europe, and the Mediterranean	per register ton	0 7
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Cardiff, continued.

FOURTH CLASS. —On all sailing, steam, or other vessels entering from or departing for all other foreign ports whatsoever	per register ton	0	9
FIFTH CLASS. —On all sailing, steam, or other vessels which do not enter within the gates of any dock or basin, but which either discharge or receive passengers or goods upon or from any pier, landing place, or jetty	per register ton	0	3
SIXTH CLASS. —On all sailing, steam, or other vessels using the Tidal Harbour of the undertakers	per register ton	0	0½
If any sailing, steam, or other vessel, being of less than 200 tons measurement, shall remain within any dock or basin for a period longer than ten days; or being of 200 tons and less than 400 tons measurement for a longer period than fourteen days; or being of 400 tons measurement or upwards for a period longer than twenty-one days, then for the period during which the vessel remains beyond those periods respectively the further rates following, (that is to say)			
For the first week or any part thereof	per register ton	0	1
For the second week or any part thereof	ditto	0	1½
For every week or part of a week beyond the second week	ditto	0	2

Penarth Harbour, Dock, and Railway.**Harbour Dues.**

Vessels not exceeding 200 tons register, per ton register,	½d.
Vessels above ditto	1d.

Ballast Rates.

Under 200 tons register, 5d. per ton of Ballast discharged.	
200 and under 400	6d. per ton.
400 and under 600	7d. per ton.
600 and under 800	8d. per ton.
800 and upwards	9d. per ton.
Discharging by night 3d. per ton extra on the quantity so discharged.	
The Dock Dues and Charges are the same as at the Bute Docks, Cardiff.	

CARMARTHEN.**Harbour Dues.**

	s.	d.		s.	d.
Vessels under 30 tons	1	0	Vessels 80 to 90 tons	2	6
30 to 60 tons	1	6	90 to 110 tons	3	0
60 to 80 tons	2	0	110 tons and upwards	5	0

Pilotage, as per agreement.

CHEPSTOW.**Harbour Dues.**

One penny per ton register, on all vessels loading or unloading alongside a wharf; also, on all vessels entering or departing the river, if from or to the eastward of the Holmes, 4d.; from or to the westward of the Holmes, 2s. 4d.

Pilotage.—The same as Gloucester.

CLOVELLY.**Harbour Dues.**

Vessels not exceeding 20 tons, 1s.; 20 to 50 tons, 2s.; above 50 tons, $\frac{1}{2}$ d. per ton.

Pilotage, &c., as per agreement.

GLOUCESTER & BERKELEY CANAL.**Rates of Tonnage.**

Charged upon gross and register weight, and on the ton of 20 cwt. of 112 lbs.

IMPORTS.				Foreign.		Coast-wise.	
				s.	d.	s.	d.
ALE, beer, porter, cider and perry, per brl. of 36 galls.				0	4	0	4
— ditto, in bottle	..	..	.. per dozen	0	1	0	1
Barilla,	..	..	.. per ton	1	6	1	0
Bricks, for building	..	..	.. per 1000	2	0	2	0
—scouring, fire, and tiles	..	..	.. per ton	2	0	1	0
Brimstone	..	..	.. "	1	6	1	0
Bones	..	..	.. "	1	0	1	0
Burr stones	..	..	.. "	1	6	1	0
Clay	..	..	.. "	0	6	0	6
Coals	..	..	.. "	0	6	0	6
CORN AND MEAL							
Wheat and all corn and seed	..	..	.. "	1	9	1	6
Flour and other meal	..	..	.. "	2	0	2	0
Bran and gurgeous	..	..	.. "	1	6	1	6
Earths	..	..	.. "	1	0	1	0
Gunpowder	..	..	.. "	5	0	5	0
Kelp	..	..	.. "	1	6	1	6
Marble	..	..	per ton of 14 cubic ft.	1	6	1	6
Manure	..	..	.. per ton	1	0	1	0
METALS AND ORES							
Copper, spelter, tin, zinc and manganese	..	..	.. "	2	0	0	9
Metallic ores	..	..	.. "	0	9	0	6
Pig iron, and old or loose iron	..	..	.. "	2	0	0	9
All other description of iron	..	..	.. "	2	0	0	9

*Gloucester and Berkeley Canal, continued.*IMPORTS, *continued.*

					Foreign.		Coasting	
					s.	d.	s.	d.
Oil cake	..	..	..	per ton	1	6	1	0
Oysters	..	..		per ton of 10 bushels	1	6	1	6
Potatoes	..	..	..	per ton	1	0	1	0
Slates	..	..	..	"	1	0	1	0
Stone, for roads, pitching, lime, chalk, flint,								
gravel, and sand	..	..	..	"	0	6	0	6
for building, block, paving, &c.	..	..	..	"	1	0	1	0
burr stones	..	..	..	"	1	6	1	0
SPIRITS and wine	..	..	..	per pipe, pun. or butt	2	6	2	6
" " "	..	..	..	per half ditto, or hogshead	1	3	1	3
" " "	..	..	..	all casks under	0	6	0	6
in bottle	..	..	..	per dozen	0	1	0	1
WOOD AND WOOD GOODS								
Mahogany and fine woods*	..	..	..	per ton	2	0	2	0
Other timber and poles†	..	..	..	"	1	6	1	6
Lathwood	..	..	..	per fathom of 4 feet	2	0	2	0
Deals and battens, per Petersburg standard of								
120, 12 ft. long, 11 in. wide, and 1½ in. thick					3	4	3	4
Railway sleepers	..	..	..	per ton	0	9	0	9
Staves, Baltic pipe	..	..	..	per 120	3	6	3	6
Puncheon and hogshead	..	..	..	"	3	0	3	0
Quebec standard	..	..	..	"	1	6	1	6
Barrel	..	..	..	"	1	0	1	0
West India Pun	..	..	..	"	0	6	0	6
New Brunswick small	..	..	..	"	0	3	0	3
Laths	..	..	..	per 1000	0	4	0	4
UNENUMERATED ARTICLES	..	..	..	per ton	2	0	1	0

EXPORTS.

Bark	..	..	..	per ton	0	6	1	0
Brick of all kinds	..	..	..	"	0	6	0	6
Clays	..	..	..	"	0	6	0	6
Coals	..	..	..	"	0	3	0	3
Corn, flour, and meal	..	..	..	"	0	6	0	6
METALS AND ORES								
Metallic ores	..	..	..	"	0	6	0	6
"Puddle bars," Pig iron, and rough								
cast-iron pipes	..	..	..	"	0	6	0	6
All other description of iron and metals	..	..	..	"	0	6	0	9
Salt	..	..	..	"	0	6	0	6
UNENUMERATED ARTICLES	..	..	..	"	0	6	1	0

* Mahogany, Oak, Ash, Elm, Beech, and other heavy Timber or Wood 40 feet to the ton.

† Fir, Pine, Deal and light Woods, 50 feet to the ton.

*Gloucester and Berkeley Canal, continued.***Regulations.**

Tonnage.—One half of the above Rates shall be charged upon goods conveyed along any part of the canal between the Stroud Junction and Sharpness Point, or the Stroud Junction and Gloucester, excepting goods coming under the operation of the 8th, 9th, or 10th regulations.

If it be proved to the satisfaction of the toll collectors that the full rate of tonnage has been paid upon any goods which have passed along the canal, half the full tonnage only shall be charged on such goods repassing along the canal, unless such half rate shall exceed the amount of the export rate, in which case the export rate upon such goods shall be charged.

All goods brought into the canal for sale, and not sold, and then exported in the same bottom, without being landed, shall only be charged with the import rate.

All goods exported in the same bottom, or transhipped for export, shall be charged with the import rate.

All goods brought into the canal, forming part of a cargo, the original destination of such goods being for any other port than Gloucester, and not landed nor transhipped, shall pass in and out of the canal free of charge, the vessel carrying such goods paying lockage.

All vessels partly laden entering the canal at Sharpness or Gloucester, to complete their cargoes, shall only be charged tonnage rates on the merchandize shipped in the canal, and the usual lockage charges; provided such inward lading is not landed nor transhipped.

All goods brought into the canal at Gloucester or Sharpness, either by land or water conveyance, and intended for exportation, shall not be charged the tonnage rates until shipped.

All Corn brought to Gloucester from Stroud by the canal shall pay a rate of 4d. per ton, and all Flour, Bran, and Gurgeons so brought shall pay a rate of 6d. per ton.

All goods brought into the canal at Gloucester, by the Severn, from places above Gloucester, or to the docks at Gloucester, by land carriage, and not conveyed upon the canal below Hempstead Bridge, except goods coming under the 10th regulation, shall pay a rate of 4d. per ton, or the rate by the table, if it be less than 4d.

All goods simply crossing the canal from the South Wales Railway Quay to the yards on the opposite side, lying to the north of the Salt Warchouses, or *vice versa*, not having previously paid canal dues, shall pay a rate of 2d. per ton.

Wharfage.—Goods remaining upon the wharfs (except the wharf specified in the foregoing regulation), for above *forty-eight hours*, *twopence* per ton. And all goods remaining upon any of the wharfs, excepting the north wharf, shall be further charged wharfage at the

Gloucester and Berkeley Canal, continued

rate of *twopence* per ton per week, and at that rate for any part of a week they may so remain after the expiration of the forty-eight hours. And all goods remaining upon the '*North Wharf*,' shall be further charged wharfage at the rate of *one shilling* per ton per week, and at that rate for any part of a week they may so remain, after the expiration of the forty-eight hours.

All goods deposited upon the wharf underneath the "Pillar Warehouse," upon the west side of the basin, and remaining there longer than twenty-four hours, shall be charged 1d. per ton per day.

Goods, carriages of every description, and all other things, shall only be placed on the wharfs, roads, and premises of the Canal Company in such manner, and on such parts thereof as the officers of the Company may direct; and if any goods, carriages, or other things shall be placed contrary to their directions, the officers of the Company may remove the same; and wharfage at the rate of 6d. per ton per hour shall be charged, after notice shall have been given to remove the same.

Floatage of Timber.—For Timber discharged from vessels into the canal, on the south side of "Siller's Bridge," and remaining afloat on the south side of such bridge, after the expiration of thirty days, a floatage rate of one halfpenny per stick per week shall be paid, and in like proportion for any part of a week; and if such timber should be removed to any part of the canal, on the north side of such bridge, a floatage rate of 1d. per stick for the first week after such removal, and 2d. per stick per week afterwards, and in like proportion for any part of a week, shall be paid.

For timber discharged from vessels into the canal, on the north side of "Siller's Bridge," and remaining afloat on the north side of such bridge, after the expiration of fifteen days, a floatage rate of 1d. per stick per week shall be paid, and in like proportion for any part of a week; and should it remain afloat on the north side of such bridge longer than twenty-eight days, after the fifteen days, 2d. per stick per week, and in like proportion for any part of a week, shall be paid.

All timber sold and delivered from one merchant to another, and put into the canal from the yards, and floating in the canal or basins two weeks following, shall pay 2d. per stick per week, and in like proportion for the whole time it may remain afloat. And all timber imported in trows or barges discharged into the canal, shall be subject to the same regulation and charge.

No timber shall be permitted to remain afloat, so as to endanger the navigation of any vessel along the canal, or interrupt or render inconvenient the navigation of the Canal.

*Gloucester and Berkeley Canal, continued.***Crannage.**

			£	s.	d.	
For each lift under 2 tons	..	0	0	3	per ton.	
2 tons and under 5	..	0	0	6	"	
5	6	..	0	10	0	for each lift
6	7	..	0	12	0	"
7	8	..	0	16	0	"
8	9	..	1	2	0	"
9	10	..	1	10	0	"
10 tons.....			2	0	0	"

All lifts exceeding 10 tons can only be made by special agreement with the Company, and at rates not less than 10s. for every ton above the preceding.

			£	s.	d.	
10 tons and under 11 tons	..	2	0	0	for each lift.	
11	12	..	2	10	0	"
12	13	..	3	0	0	"
13	14	..	3	10	0	"
14	15	..	4	0	0	"

Lockage.—Every vessel passing through the Company's locks empty or in ballast, shall pay 1d. per ton on the register tonnage for each lock of water; and every vessel bringing into, or conveying along the canal, a less quantity of goods than her register tonnage, shall pay a 1d. per ton per lock on the difference between the tonnage of the goods on board and the register tonnage of the vessel—provided that the hold of the vessel is not full.

In all cases of removal of goods, wares, and merchandize, from the Company's wharfs or docks, through the locks, upon which the above rates of tonnage have been paid, such further payment only shall be made as will amount to 1d. per ton on the register tonnage of the vessel departing with such goods.

Moorage.—All vessels remaining in the Canal or basins longer than one calender month, shall be charged upon the register tonnage, the following rates, viz.:—One halfpenny per ton per week, if such vessels shall be moored, or remain on the north side of Hempstead Bridge, and one farthing per ton per week, if moored, or remaining in any part of the canal below Hempstead Bridge.

Lockage and Moorage.—Boats and vessels under twenty tons burthen shall be rated as twenty tons.

Weighing Machine Rates.—For coal, manure, stone, and gravel, 2d. per ton; all other goods, 3d. per ton.

Tracking.—The following scale of charges shall be paid by the masters of vessels for tracking, viz.:—

*Gloucester and Berkeley Canal, continued.**For the whole length of the Canal,*

For vessels under 26 tons 8s. 6d. each way.

,, above 26 and not exceeding 150 tons 4d. per ton.

,, above 150 { for 150 tons 4d.
for the remainder..... 2½d.One half of the above rates shall be paid to and from the Junction,
and ½d. per ton per mile for all intermediate distances.**Ballast.**If put on board at the Ballast Banks..... s. d.
0 8 per ton.If brought in carts, or alongside afloat, either at
Gloucester, or within two miles thereof..... 1 0 ,,If thus taken in carts or afloat at any other part
of the Canal. 1 2 ,,

If in the tidal Basin at Sharpness 1 6 ,,

All ballast not supplied by the ballast contractor will be charged
tonnage at the rate of 6d. per ton.**Canal Pilotage.***The Canal Pilots are authorized to demand and take the following
charges for Piloting Vessels up or down the Canal.*

Vessels under 75 tons register..... 5s. 0d. up or down.

Vessels 75 and under 100 tons register .. 7s. 6d. ,,

Register Tonnage.	Draft of Water.		Charge.		Register Tonnage.	Draft of Water.		Charge.	
	ft.	in.	s.	d.		ft.	in.	s.	d.
100 ..	11	0	..	10 0	375 ..	13	9	..	21 0
125 ..	11	3	..	11 0	400 ..	14	0	..	22 0
150 ..	11	6	..	12 0	425 ..	14	3	..	23 0
175 ..	11	9	..	13 0	450 ..	14	6	..	24 0
200 ..	12	0	..	14 0	475 ..	14	9	..	25 0
225 ..	12	3	..	15 0	500 ..	15	0	..	26 0
250 ..	12	6	..	16 0	525 ..	15	3	..	27 0
275 ..	12	9	..	17 0	550 ..	15	6	..	28 0
300 ..	13	0	..	18 0	575 ..	15	9	..	29 0
325 ..	13	3	..	19 0	600 ..	16	0	..	30 0
350 ..	13	6	..	20 0					

And 6d. additional for every three inches draft of water above.

Channel and River Pilotage.**LIMIT.**—The Bristol Channel eastward of Lundy Island, including the River
Severn to the City of Gloucester and the River Wye to Chepstow Bridge.Every licensed pilot employed in piloting vessels to or from the
port of Gloucester shall be paid the following Pilotage rates, accord-
ing to the register tonnage of the vessel.

I.

Gloucester and Berkeley Canal, continued.

			To or from Lundy and								
			Holmes or Cardiff Roads			Kingroad			Sharpness		
			£	s.	d.	£	s.	d.	£	s.	d.
Under 100 tons	.....		1	10	0	2	0	0	4	0	0
100 tons and under 200			2	0	0	2	10	0	5	0	0
200	"	300	2	7	6	3	0	0	6	0	0
300	"	400	2	15	0	3	10	0	7	0	0
400	"	500	3	5	0	4	2	6	8	5	0
500	"	600	3	15	0	4	15	0	9	10	0
600	"	800	4	5	0	5	7	6	10	15	0
800	"	1000	5	0	0	6	5	0	12	10	0
1000 tons and upwards			5	15	0	7	5	0	14	10	0

			To or from Nash Point or Minehead and Holmes or								
			Cardiff Roads			Kingroad			Sharpness		
			£	s.	d.	£	s.	d.	£	s.	d.
Under 100 tons	.....		1	0	0	1	10	0	3	10	0
100 tons and under 200			1	5	0	1	15	0	4	5	0
200	"	300	1	10	0	2	2	6	5	2	6
300	"	400	1	15	0	2	10	0	6	0	0
400	"	500	2	2	6	3	0	0	7	2	6
500	"	600	2	10	0	3	10	0	8	5	0
600	"	800	2	17	6	4	0	0	9	7	6
800	"	1000	3	7	6	4	12	6	10	17	6
1000 tons and upwards			3	17	6	5	7	6	12	12	6

			To or from Holmes or Cardiff Roads and					
			Kingroad			Sharpness		
			£	s.	d.	£	s.	d.
Under 100 tons	.....		0	10	0	2	10	0
100 tons and under 200	....		0	12	6	3	2	6
200	"	300	0	15	0	3	15	0
300	"	400	0	17	6	4	7	6
400	"	500	1	2	6	5	5	0
500	"	600	1	7	6	6	2	6
600	"	800	1	12	6	7	0	0
800	"	1000	1	17	6	8	2	6
100 tons and upwards	.....		2	2	6	9	7	6

To or from Kingroad or Sharpness—

			£	s.	d.				£	s.	d.
Under 40 tons	.....		0	15	0	300 tons and under 400			3	10	0
40 tons and under 60			1	1	0	400	"	500	4	2	6
60	"	80	1	11	6	500	"	600	4	15	0
80	"	100	2	0	0	600	"	800	5	7	6
100	"	200	2	10	0	800	"	1000	6	5	0
200	"	300	3	0	0	1000 tons and upwards			7	5	0

Gloucester and Berkeley Canal, continued.

Pilots taken on board any vessel inward bound to the westward of Ilfracombe, shall be paid the same Pilotage rates as from Lundy Island; if between the Nash Point and Ilfracombe, the same rates as from the Nash Point; if between the Nash Point and the Holmes, the same rates as from the Nash Point; and if between the Holmes and Kingroad, the same rates as from the Holmes.

Pilots, discharged from any vessel on the outward voyage between any of the stages mentioned in the above scale of rates, shall be paid the same Pilotage rates as if they had been taken to the next stage beyond the place where they were discharged.

All vessels piloted to Chepstow or to Lydney shall pay the same pilotage rates as to Sharpness, and vice versa, with the exception of Coal laden vessels coastwise to and from Lydney, under 200 tons register, for which a special scale of charges, at a reduced rate, is provided by the 4th Pilotage Bye Law.

Vessels piloted from Sharpness to Lydney, or from Lydney to Sharpness, and then to Kingroad, shall pay the same rates as between Sharpness and Kingroad.

Vessels piloted to and from any place in the River Severn above Sharpness shall pay one-fourth more than the rates between Sharpness and Kingroad.

All light vessels between Kingroad and Sharpness, or any intermediate point, shall be entitled to one-fifth reduction on the full pilotage charges for that portion of the district; and all vessels propelled or towed wholly by steam power, between Kingroad and Sharpness, or any intermediate point, shall be entitled to a further reduction of one-fourth of the full pilotage charges for that portion of the district.

Vessels taking a Pilot from Kingroad to any place on the River Severn must employ assistants to the Pilot, whose number and payment are regulated by the 6th Pilotage Bye Law.

Vessels retaining a Pilot on board after he has discharged the duties for which he was engaged, or whilst waiting for water up the River Severn, or whilst delayed by contrary winds when outward bound, and vessels in charge of a Pilot compelled to bear up and return from the westward from stress of weather or accident, must compensate him according to the regulations contained in the 7th, 8th, and 9th Pilotage Bye Laws.

In addition to the foregoing charges, a Collector's Fee, varying according to the size of the vessel, from 6d. to 2s 6d. is payable under the 10th Pilotage Bye Law.

HAVERFORDWEST.

Keelage and Wharfage.—One penny per ton registered tonnage.

ILFRACOMBE.**Keelage.**

For every ship or vessel driven in by stress of weather, &c.

Coasters belonging to the port..... 0s. 6d.

„ not belonging to the port 1s. 6d.

Vessels going to or coming from any of Her Majesty's Plantations in Asia, Africa, or America, 2s. 6d.

Also, for every vessel paying Keelage, the additional sum of 6d. for each Top borne by such vessel.

Lighthouse.

For every vessel belonging to the port..... 0s. 6d.

For every vessel not belonging to the port .. 1s. 0d.

The Light is kept up from the first day of September to the last day of April in every year.

Mooring Chains and Buoys.

Smacks, 1s.

Two-mast vessels, 2s.

Foreign going, 1s. extra.

When the light is out, 6d. each less for vessels belonging to the Harbour, and 1s. each less for vessels not belonging to the Harbour.

LLANELLY.**Pilotage.**

LIMIT No. 1.—If a Pilot be taken on board as far to the westward as to bring Rhossilly Church open to the westward of the Holmes, he is to be paid for every foot of water the vessel may draw.

LIMIT No. 2.—If taken on board within No. 1. but to the westward of No. 4 buoy for Pembrey, or No. 6. for Llanelly.

	Limit No. 1.		Limit No. 2.		Outwards.	
	s.	d.	s.	d.	s.	d.
Under 50 tons register ..	1	9	..	1 0	..	0 6
From 50 to 75 „ ..	2	0	..	1 3	..	0 9
75 to 100 „ ..	2	3	..	1 6	..	1 0
100 to 125 „ ..	2	6	..	1 9	..	1 3
125 to 150 „ ..	2	9	..	2 0	..	1 6
150 to 175 „ ..	3	0	..	2 3	..	1 9
175 to 200 „ ..	3	3	..	2 6	..	2 0
200 to 225 „ ..	3	6	..	2 9	..	2 3

and 3d. per foot for every additional 25 tons register.

Pilots taken on board inside buoy No 6, when bound for Llanelly, or inside No. 4, when bound for Pembrey, to be paid 2s. 6d. each for a hobble.

Llanelly, continued.

If any vessel shall evade being boarded by a Pilot in Limit No. 1, she shall pay for Limit No. 1, although boarded above that limit, beside the penalty for refusing a Pilot.

Each vessel to pay 1s. for the boat.

That when any vessel not exceeding 125 tons register shall have the assistance of a steam-tug in taking her out to sea, a reduction of ten per cent. shall be made on her outward Pilotage.

That all vessels proceeding above Llanelly shall pay as follows, in addition to the rates inwards and outwards from Llanelly:—

	To or from Penclawdd		To or from Spitty		Penclawdd to Spitty
	s. d.		s. d.		s. d.
Under 50 tons register..	3 6	..	5 0	..	3 6
From 50 to 100 „	4 6	..	7 0	..	4 6
100 to 150 „	5 6	..	9 0	..	5 6
150 to 200 „	7 0	..	10 6	..	7 0

and 6d. for every additional 25 tons register.

Harbour Pilotage,

Under 50 tons, 2s.; 50 and under 75, 2s. 6d.; 75 and under 100, 3s.

For removing vessels between

		Llanelly and Pembrey		Pembrey and Burry Port.
		s. d.		s. d.
Under 50 tons register	....	3 6	..	3 6
75 „	....	4 6	..	4 0
100 „	....	5 6	..	4 6

For every additional 25 tons—Llanelly and Pembrey, 1s.; Pembrey and Burry Port, 6d.

Vessels sailing from the port, and putting back after having discharged their Pilots, to pay half Pilotage in and out.

Three shillings and sixpence to be the rate charged for a Bar hobble.

“Ceres” Pilot Ship.

That a charge of 2s. 6d. per 100 tons register be made upon every vessel taking a Pilot boarded from the “Ceres.”

Ballast Rates

Every vessel shall pay for every ton discharged, 5½d.

For each man otherwise employed, ½d. per ton.

Buoyage Dues.

For every ship or other vessel entering into the Rivers Burry, Loughor, and Lliedi, or either of them, from and over the Bar of Burry, 1d. per ton register, and ½d. per ton for Light Dues.

*Llanelly, continued.***Dock Dues.**

Llanelly or New Dock..... 2d. per ton register.

Copper Works' Dock 1d. „

Carmarthenshire Dock, 1d. per ton register, for vessels entering or using the Dock, and 1d. per ton the first week, and a farthing per ton every week, after, if for repairs or lying up.

LYDNEY.**Tonnage Rates.**

	s.	d.		s.	d.
1 to 10 tons burthen ..	1	0	45 to 50 tons burthen ..	4	6
11 to 20 „ ..	2	0	51 to 80 „ ..	5	0
21 to 30 „ ..	3	0	81 to 100 „ ..	6	0
31 to 44 „ ..	4	0	101 tons and upwards	7	6

Pilotage.—The same as Gloucester.

MILFORD.**DEFINITION OF LIMITS.**

From Caldy Island along the coast to St. David's Head, and from thence to Cardigan Island, and *vice versa*; and to and from, and into and out of all ports and places within these Limits.

Pilotage Rates.

	Under 14 ft. per foot.			14 ft. & Up per foot.		
	£	s.	d.	£	s.	d.
From a line drawn from St. Ann's Point to Sheep's Island, to any part of the Harbour below a line drawn from Newton Noyse Point to Martin's Haven.....	0	2	6	0	3	6
From a line drawn from St. Ann's Point to Sheep's Island, or from Habberstone Road to any place above a line drawn from Newton Noyse Point to Martin's Haven in addition.....	0	2	0	0	2	6

Vessels inward-bound not boarded until they have passed a line drawn from Rat Island to Watwick Point, are to pay one-fourth less than the foregoing rates, and if not boarded until they have passed a line drawn from Thorne Island to Great Castle Head, they are to pay one-half only of the said rates, and if not boarded until they have passed the Stack Rock, to a line from Newton Noyse Point to Martin's Haven, they are not to be chargeable with any Pilotage unless the masters thereof require Pilotage assistance.

*Milford, continued.***Additional Rates.***For Ships boarded without the entrance of the Harbour.*

	£	s.	d.
From a line drawn from Leuny Point to Skokham Island			
in addition, per foot	0	2	0
If to the southward of St. Gowan's Head, ditto	0	1	0
Or from Caldy Island eastward, or from the westward of the Grassholm, or three leagues without Leuny Point, in addition to the Harbour Pilotage	3	3	0
Six leagues, ditto	4	4	0
Ten leagues, ditto	6	6	0

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first-mentioned ships shall by an order of Her Majesty's most Honourable Privy Council, be privileged to enter the ports of this Kingdom upon paying the same duties of tonnage as are paid by British ships, in which case such ships and vessels not having British registers shall pay the like rates of Pilotage only as are payable by ships having British registers. The said surplus rate chargeable on unprivileged Foreign vessels is to be paid to the Collector of this Corporation's Light Duties, at the Custom House, Milford.

Port Charges.

	£	s.	d.
Keelage	0	0	4
Making fast to the rings	0	0	6
Quayage and moorage per ton register	0	0	0½
Foreign vessels, loading or discharging, per ton	0	0	6
Coasting vessels, loading or discharging, per ton	0	0	2
Loading ballast, per ton	0	0	2
Deposit for landing ballast on quay	1	0	0
Ballast lying on the quay, per ton	0	0	0½
Use of beach discharging	0	1	0
Use of beach outfitting or repairing, per ton register	0	0	1
Vessels lying alongside the quay for any period not exceeding one month, per ton register	0	0	2
And for every succeeding month	0	10	0

NEATH.**Tonnage Rates.**

For every ship or vessel which shall anchor, load, or unload within the said port, or which shall be made fast to any pier or other work within the same, or any part thereof, the sum of 1½d. per ton of the register tonnage of such ship or vessel.

*Neath, continued.***Rates of Pilotage.**

LIMIT.—From the outside of Neath Bar into the Port and Harbour of Neath, and *vice versa*.

FIRST STATION.—From outside of Neath Bar to the Layer, and to any distance between the Layer and the southern end of Abbey Estate, and *vice versa*.

Vessels under 40 tons register, 7s.; over 40 and under 60, 10s. with or without Steam.

SECOND STATION.—From outside of Neath Bar to any distance lying between the inner termination of the First Station and the Abbey Pill, and *vice versa*.

Vessels under 40 tons register, 8s.; over 40 and under 60, 11s. with or without Steam.

THIRD STATION.—From outside of Neath Bar to any distance lying between the Abbey Pill and Neath Bridge, and *vice versa*.

Vessels under 40 tons register, 9s. 6d.; over 40 and under 60, 13s. 6d. with or without Steam.

For vessels over 60 tons register, the rates are as follows:—

Draught of Water.	1st Station.			2nd Station.			3rd Station.		
	Without Steam.			Without Steam.			Without Steam.		
	£	s.	d.	£	s.	d.	£	s.	d.
8 feet ..	0	11	3	0	8	5	0	12	9
8½ " ..	0	12	0	0	9	0	0	10	2
9 " ..	0	12	6	0	9	5	0	10	6
9½ " ..	0	13	0	0	9	9	0	10	11
10 " ..	0	13	6	0	10	2	0	11	3
10½ " ..	0	14	0	0	10	6	0	12	0
11 " ..	0	14	6	0	10	11	0	12	7
11½ " ..	0	15	9	0	11	10	0	13	8
12 " ..	0	16	10	0	12	8	0	14	11
12½ " ..	0	18	6	0	14	2	0	16	6
13 " ..	1	0	6	0	15	5	0	18	5
13½ " ..	1	2	6	0	16	11	0	19	3
14 " ..	1	8	0	1	1	0	1	13	0
14½ " ..	1	13	6	1	5	2	1	19	6
15 " ..	2	1	6	1	11	2	2	8	6
15½ " ..	2	10	6	1	18	0	2	17	9
16 " ..	3	1	0	2	5	9	3	8	6
16½ " ..	3	12	0	2	14	0	4	0	6
17 " ..	4	5	6	3	4	2	4	14	0
17½ " ..	4	19	0	3	14	3	5	8	0
18 " ..	5	13	0	4	5	0	6	3	0

And 10s. for every half foot over 18 feet.

And 7s. extra for every half foot over 18 feet.

And 8s. extra for every half foot over 18 feet.

For conducting vessels from one station to another station within the Port:—

	s.	d.
Vessels under 100 tons	3	0
" over 100 tons and under 150 ..	4	0
" " 150 " " 200 ..	5	0
" " 250 " " ..	8	0

Neath, continued.

To or from the Mumbles:—		s.	d.
Vessels under 250 tons	4	0	extra
„ over 250 „	7	0	„

Pilot Boats and Hobblers' Fees, 5s., which is included in the rates.

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first mentioned ships shall by any order of Her Majesty's most Honourable Privy Council, be privileged to enter the ports of this kingdom, upon paying the same duties of tonnage as are paid by British ships, in which case such ships and vessels not having British registers shall pay the like rates of Pilotage only as are payable by ships having British registers.

Pilot leading the way (if required by the master of the vessel following), entitled to half-pilotage as far as he shall lead.

Rates to Hobblers.

	s.	d.
Hobbler over the Bar, to or from the Laver or Giant's Grave, or the southern end of the Abbey Estate	2	6 per vessel.
Hobbler over the Bar, to or from Fox's Coal Bank, or the Copper Works, or the Abbey Pill,..	3	0 „
Hobbler over the Bar, to or from Melincrythan Wharf or Neath Bridge ..	4	0 „
Hobbler employed in removing or assisting vessels within the Harbour ..	1	6 per tide

Towage Rates and Regulations.**INWARDS.**

	Per ton register.
s.	d.
From the Outer Buoy to Laver or Giant's Grave..	0 1½
„ „ Abbey Coal or Crown Copper Works	0 1½
„ „ Mines Royal Copper Works	0 2
„ „ Neath	0 2½

OUTWARDS.

From Giant's Grave or the Laver to Sea or Outward Buoy	0 2
„ Abbey Coal or Crown Copper Works to Sea or or Outward Buoy	0 2½
„ Abbey Pill or Mines Royal Copper Works to Sea or Outward Buoy	0 2½
„ Neath to Sea or Outward Buoy	0 2½

Vessels that may require to be towed shorter distances, if not having been offered the steamer to tow them the whole distance from where they were laden or going to load, to pay as under:—

From the Laver to Giant's Grave, and <i>vice versa</i> ..	0 0½
„ Abbey Coal or Crown Copper Works ..	0 1
„ Abbey Pill or Mines Royal Copper Works	0 1½
„ Neath	0 1½

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Neath, continued.

	s.	d.
From Giant's Grave to Abbey Coal or Crown Copper Works	0	0½
" Abbey Pill or Mines Royal Copper Works	0	1
" Neath	0	1½
From Abbey Coal or Crown Copper Works to the Pill	0	0½
" Neath	0	1
Light vessels towed from Swansea or Port Talbot to Giant's Grave	0	2
Light vessels towed from Neath Harbour to Swansea or Port Talbot	0	6
Loaded vessels towed to Swansea or Port Talbot (in addition to the rate of towage from the various Stations to the Outward Buoy)	0	3
Vessels from 150 tons register and upwards, for towage in or out, to or from Giant's Grave	0	2
All vessels not exceeding thirty tons register to pay 3s. 6d. for towage in or out, to or from Giant's Grave.		
Three shillings the lowest rate for any towage.		

NEWPORT.**Tonnage Rates.**

Coastwise, ½d. per ton register. Foreign, ¾d. per ton register.

Keelage.

One penny per ton taken on discharged, at the Wharves in the River.

Tonnage Rates—Docks.

	s.	d.
INWARDS.—For every ship or other vessel which shall enter the said dock from any part of Great Britain, Ireland, the Isle of Man, or any part of the Islands of Guernsey, Jersey, Alderney, and Sark, per ton measurement	0	2
For every other part of Europe, except places within the Straits of Gibraltar and round the North Cape, per ton measurement	0	5
From any port or place in Europe round the North Cape, or any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa, per ton measurement	0	7
From any port or place in British America, any port or place in the United States of America, or any port or place in any other part of the world, per ton measurement	0	10
For every ship or other vessel, with a cargo, which shall enter the said dock, and depart therefrom, within three weeks from the day of entry, without breaking bulk, or which shall discharge, and afterwards take on board, and depart with the same cargo, within such period of three weeks, per ton measurement (exclusive of the dues under the name of rent hereinafter mentioned)	0	6

Newport, continued.

	s.	d.
For every ship or other vessel which shall have departed from the said dock with a cargo, or any part of such cargo laden therein, and shall re-enter the said dock, with the same cargo, or part of such cargo, per ton measurement, (exclusive of the dues under the name of rent hereinafter mentioned)	0	3
OUTWARDS.—For every ship or other vessel which shall depart from the said dock to any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney, and Sark, per ton measurement	0	2
To any other part of Europe, except places within the Straits of Gibraltar and round the North Cape, per ton measurement	0	5
To any port or place in Europe, round the North Cape, or any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa, per ton measurement	0	7
To any port or place in British America, any port or place in the United States of America, or any port or place in any other part of the world, per ton measurement	0	10
For every ship or other vessel which shall enter the said dock in ballast, or light, and depart therefrom in ballast, or light, per ton measurement (exclusive of the dues under the name of rent hereinafter mentioned)	0	3

Police and Watchmen.

For all vessels entering or departing from the dock, at per week, or fractional part of a week	1	0
N.B.—Competent watchmen for the protection of vessels and property therein can be obtained on application at the dock-office, the charge for each watchman is per night	3	6

Rent Charges.

All ships and vessels entering the dock in ballast and departing with cargoes not exceeding 400 tons register measurement, to be allowed to remain at the rates before specified for a period of	2	weeks
Above 400 tons and not exceeding 700 tons register measurement	3	"
Above 700 tons register measurement	4	"
Vessels above 70 tons and not exceeding 700 tons register measurement entering with a cargo and going out with another	4	"
Vessels above 700 tons register measurement entering with a cargo and going out with another	5	"
Vessels above 70 tons register measurement entering with a cargo and going out without breaking bulk, or which shall discharge, and afterwards take on board and depart with the same cargo	3	"

Newport, continued.

Vessel under 70 tons register measurement, entering the dock without ballast 4 days
a d

All ships and vessels which shall remain in the dock for any longer periods than those respectively above stated, shall be subject (in addition to the rates and dues before stated) to a rent charge of, for the first week, or any portion of a week, per ton register measurement.. .. . 0 0½

For the second week or any portion of a week, per ton register measurement 0 1

For the third week or any portion of a week, per ton register measurement 0 1½

For the fourth week and every subsequent week and for any portion of a week, per ton register measurement 0 2

N.B.—In estimating the dues contained in the foregoing schedule, every vessel of less than 20 tons register measurement shall be rated at 20 tons register measurement.

Use of Machinery for Shipping or Unshipping.

For every ton of coal 0 1½

For every ton of coke, culm, iron, cinders, iron ore, earth or rubbish of any kind 0 2½

For every ton of metallic (not iron) ore 0 3

Whenever waggons containing any of the above articles are moved on the railway sidings by hydraulic power in connection with the shipping machines, a charge will be made at the rate per ton of 0 1

All articles, matters or things not included in the above-mentioned, and excepting ballast, will be subject to special agreement and charges.

Persons (other than the crews of vessels on the dock), landing or embarking on the Dock Company's premises, will be subject to a charge per head of 0 1

Charges for Discharging and removing Ballast.

For every ton of ballast that is in the hold within 15 feet abaft, and 15 feet before any hatchway 1 0

For every ton of ballast exceeding in the hold a greater distance than stated above, an additional sum of 0 2

An additional charge for working by night will be made at the rate of per ton 0 3

Rates of Pilotage.

The Limit of this Pilotage is that portion of the Bristol Channel which lies eastward of Lundy Island, up to, and includes Kingroad and the River Usk as far as the Caerleon Bridge. This Pilotage is not compulsory, but may be obtained over all or any portion of this district, at the discretion of the masters of vessels.

Newport, continued.

Every licensed Pilot employed in piloting vessels to or from the port of Newport shall be paid the following Pilotage Rates, according to the registered tonnage of the vessel.

FOR LADEN VESSELS.

		Newport to Mouth of River Usk.			Newport to the Holmes or Cardiff Roads.		
		£	s.	d.	£	s.	d.
If under 100 tons.....		0	10	0	..	0	13 0
100 tons and under 200		0	15	0	..	1	0 0
200 " 300		0	17	6	..	1	10 0
300 " 400		1	2	6	..	1	15 0
400 " 500		1	5	0	..	2	1 0
500 " 600		1	6	0	..	2	3 0
600 " 800		1	8	0	..	2	8 0
800 " 1000		1	10	0	..	2	12 0
1000 tons and upwards.....		1	12	0	..	2	16 0

For all vessels actually engaged in the coasting trade of the United Kingdom, and vessels in ballast, the charges to be one-third less than the above.

FOR LADEN AND UNLADEN VESSELS.

		Limit No. 1.			Limit No. 2.			Limit No. 3.		
		£	s.	d.	£	s.	d.	£	s.	d.
If under 100 tons		0	7	6	0	17	6	1	5	0
100 tons and under 200		0	10	0	1	5	0	1	12	6
200 " 300		0	15	0	1	15	0	2	10	0
300 " 400		0	17	6	1	17	6	2	17	6
400 " 500		1	0	0	2	2	6	3	5	0
500 " 600		1	2	6	2	7	6	3	15	0
600 " 800		1	5	0	2	15	0	4	5	0
800 " 1000		1	10	0	3	5	0	5	5	0
1000 tons and upwards		1	15	0	3	15	0	6	0	0

LIMIT No. 1.—Between the Holmes or Cardiff Roads and Minehead or Kingroad, or any point east of Minehead and west of Kingroad.

LIMIT No. 2.—Between the Holmes or Cardiff Roads and Coombe, or any Point west of Minehead or Nash Point, and east of Coombe.

LIMIT No. 3.—Between the Holmes or Cardiff Roads and Lundy Island, or any point west of Coombe.

Any Pilot who may be required to remain on board any ship or vessel for the convenience of the captain, owner, or agent, after he shall have discharged the duties for which he was engaged, shall be entitled to be paid ten shillings per day for every day he may be employed; and any Pilot who may be required to move any ship or vessel in the dock, harbour, or river, occupying only one tide, shall be entitled to be paid for every ship.

Newport, continued

	s.	d.
Under 100 tons	4	0
100 and under 300	5	0
300 " 500	7	6
500 " 800	10	0
800 and upwards	12	6

Vessels wind-bound in the waters of the Newport District, and retaining the services of a Pilot, shall pay five shillings per diem.

Pilots taken on board of any vessel inward bound to the westward of Ilfracombe, shall be paid the same Pilotage rates as from Lundy Island; but if west of Nash Point or Minehead and east of Ilfracombe the same rates as from the Nash Point; if between the Nash Point and the Holmes, the same rates as from the Nash Point; and if between the Holmes and Kingroad, the same rates as from the Holmes.

In case any vessel shall be compelled to bear up and return from the westward from stress of weather or accident the Pilot in charge shall be entitled to, and shall be paid one-third of the Pilotage charge in addition, according to the distance such ship or vessel may have reached before she shall have put back.

Every master, owner, or agent of any vessel employing a Pilot, shall in addition to the foregoing charges, pay a clerk or collector's fee, as follows, viz. :—

	s.	d.
Vessels under 100 tons	0	6
100 and under 300	1	0
300 " 500	1	6
500 " 800	2	0
800 and upwards	2	6

PEMBREY.**Ballast Rates.**

Wheeling, 1d. per ton register.

Every man employed on board to be paid at the rate of three shillings per day.

Each vessel to pay extra for the use of the planks, barrows, and waggons, viz. :—

	s.	d.
Not exceeding 50 tons register	1	0
" 100 "	1	6
" 150 "	2	0
" 200 "	2	6
" 300 "	3	0
" 350 "	3	6
" 400 "	4	0
Exceeding 400 "	4	6

The same charge extra for the use of the crane and tubs if required.

*Pembrey, continued.***Harbour Dues.**

	s.	d.
For every ship, barge, boat, or other vessel, coming in or going out of the harbour, to load or unload, per ton	0	2
For every ship, barge, boat, or other vessel, running into the harbour by stress of weather, and not unloading	0	1
And for every such ship, barge, boat, or other vessel running into the harbour by stress of weather, for shelter, and lying longer than 7 days, the further sum per ton per day of	0	0½
For every ship, barge, boat, or other vessel, coming into the harbour to seek a freight of whatever tonnage, the sum of ..	1	0

Stemming.

	s.	d.
Vessels not exceeding 20 tons register.....	0	6
" 50 "	1	0
" 75 "	1	6
" 100 "	2	0
Exceeding 100 "	2	6

PENNARD.

Keelage, 4d. per ton register.

PORTHCAWL.**Tonnage Rates.**

Coastwise, 2d. per ton register. Foreign, 4d. per ton register.

Ballast.

For discharging the ballast of any ship, fourpence per ton shall be paid upon the registry tonnage of such ship, or such smaller sum per ton, as shall from time to time be fixed upon by the Harbour Master, but if any ship shall have under a cargo ballast not exceeding fifteen tons in quantity, then sixpence per ton, in quantity as aforesaid, or such smaller sum per ton as shall be fixed upon as aforesaid, shall be paid, but if it shall exceed fifteen tons, then the ship shall be considered as being in ballast, and pay fourpence per ton register.

Exceeding 15 tons, 4d. per ton register.

Any ship arriving in tow of a steamer, after having discharged her last cargo at a neighbouring port, shall pay 1s. per ton for discharging her ballast, if not exceeding 15 tons; if exceeding 15 tons, 4d per ton register tonnage.

The charges are subject to modification on completion of the Floating Dock and other improvements in progress at this harbour.

Depth of Water on the Cill of Half-tide Basin :—Neaps, 16 feet; Springs, 26 feet.

The gate at entrance of Half-tide Basin being in working order, vessels can now load afloat.

*Porthcawl, continued.***Pilotage.**

From any place between Sker or Nash Points, and inside the sands into the harbour, and out of the harbour, to every such place :—

	£	s.	d.
Per registry under 30 tons	0	4	0
30 and under 40	0	5	0
40 " 50	0	6	6
50 " 60	0	8	0
60 " 75	0	10	0
75 " 100	0	12	0
100 " 125	0	15	0
125 " 150	0	18	0
150 " 175	1	2	0
175 " 200	1	6	0
200 " 225	1	10	0
225 tons and upwards	1	14	0

And for the use of the Pilot Boat, every ship using the same :—

	s.	d.
Per registry under 75 tons	1	0
75 tons and upwards	2	0

For transporting a ship in the harbour, and re-mooring her, or for mooring or unmooring a ship, 1s. 6d. for each pilot, and 9d. for each hobbler.

And if any master of a ship shall engage a Pilot and hands to take his ship out of the harbour, and she is not ready to be taken out during that tide, or if after having been moved for the purpose of being taken out she does not proceed, 1s. 6d. for each Pilot, and 9d. for each hobbler or assistant.

PORT TALBOT.**Tonnage Rates.**

For every vessel laden 3d. per ton register.

For every vessel in ballast .. 2d. ,,

Pilotage.

		From Outer Buoy to destination, if in 1 tide of 3 hrs.			To Outer Buoy from berths, if in 1 tide of 3 hrs.		
		£	s.	d.	£	s.	d.
Above 25 tons register and under 40	..	0	5	0	..	0	4 0
40	..	0	6	0	..	0	5 0
50	..	0	7	0	..	0	6 0
60	..	0	8	0	..	0	6 10
70	..	0	9	0	..	0	7 8
80	..	0	10	0	..	0	8 6
90	..	0	12	0	..	0	9 10

Port Talbot, continued.

		£	s.	d.		£	s.	d.
Above 100 tons register and under 120	..	0	14	0	..	0	11	6
120	"	140	..	0	16	0	..	0
140	"	160	..	0	18	0	..	0
160	"	180	..	1	0	0	..	0
180	"	200	..	1	5	0	..	1
200	"	250	..	1	10	0	..	1
250	"	300	..	2	0	0	..	1
300	"	350	..	2	15	0	..	2
350	"	400	..	3	10	0	..	2

and for every additional 50 tons 0 5 0 .. 0 4 0

If inside the outer buoy only one-half of the foregoing rates.

For transporting a vessel from one part of the harbour to another—under 100 tons, 2s. 6d.; above 100 tons, 5s.

The price paid to hobbler not to exceed 2s. for each hobble; and no hobbler shall charge two hobbles, unless occupied for more than three successive hours.

For every hobbler engaged by the master, 1s. 6d. from sea into the dock, and 2s. from sea to the wharf of her destination; if required to tow, 6d. additional to each hobbler; if engaged only to the end of the breakwater, half the above rates only to be charged.

Steam Tugs.

To or from the outer Buoy.

Register Tonnage.	£	s.	d.	Register Tonnage.	£	s.	d.
20 tons and under ..	0	3	0	100 and under 120 ..	0	17	0
20 and under 30 ..	0	4	0	120 ..	1	1	0
30 ..	0	5	0	150 ..	1	5	0
40 ..	0	6	0	200 ..	1	10	0
50 ..	0	8	0	250 ..	2	0	0
60 ..	0	9	0	300 ..	2	10	0
70 ..	0	10	6	400 ..	3	10	0
80 ..	0	13	0	500 ..	4	10	0
90 ..	0	15	0	600 ..	4	10	0
100 ..	0	15	0	every additional 50 tons	0	5	0

Stemming Fee, 1s.

For use of Harbour Company's tow rope:— s. d.

Vessels under 50 tons register burthen....	1	6
" of 50 tons and under 100	2	0
" 100 .. 200	3	0
" 200 .. 300	4	0
" 300 tons and upwards	5	0

Ballast.

Ballast in the river is free of charge; in the dock 3d. per ton.

For use of planks and barrows for 10 tons and under, 2s.; 10 tons and under 20, 3s. 6d.; and 1s. extra for every 10 tons additional.

For use of the graving bank,—on the hard, 1d. per ton register per week; on the blocks, 1½d. per ton register per week.

SAUNDERSFOOT.**Pilotage.**—For every 100 tons in and out, 10s.**Harbour Dues.**—2d per ton register.**Pier Light and Signal**

Each Vessel.	s.	d.	Each Vessel.	s.	d.
20 to 30 tons register....	0	3	70 to 100 tons register..	1	0
30 to 50 ,, 	0	6	100 to 150 ,, ..	1	6
50 to 70 ,, 	0	9	150 tons and upwards ..	2	0

Discharging Ballast.

For each man employed on board.... 1d. per ton register.

For wheeling 1d. ,,

Trimming.—2d. per ton.**SWANSEA.****Tonnage Rates.**

For every vessel bound from and to any port or place in the United Kingdom, or the Isle of Man, under 150 tons	per ton	0	4
150 tons and under 250 tons	per ton	0	5½
250 tons and under 350 tons	per ton	0	7
350 tons and upwards	per ton	0	8½
For every vessel bound to or from any port or place in Europe, or any port or place within the Straits of Gibraltar, under 100 tons	per ton	0	4
100 tons and under 250 tons	per ton	0	6
250 tons and under 350 tons	per ton	0	7½
350 tons and upwards	per ton	0	9
For every vessel bound to or from any other port or place than above specified, under 150 tons	per ton	0	7½
150 tons and under 250 tons	per ton	0	9½
250 tons and under 350 tons	per ton	1	0
350 tons and upwards	per ton	1	3

And in respect of Vessels entering in Ballast, and departing with Cargoes, the following Rates.

Vessels bound to ports in the United Kingdom, or the Isle of Man	per ton	0	3
Vessels bound to any port in Europe, or within the Straits of Gibraltar, under 100 tons.....	per ton	0	3
100 tons and under 250 tons	per ton	0	5
250 tons and under 350 tons	per ton	0	6
350 tons and upwards	per ton	0	7
Vessels bound to any other ports, under 150 tons ..	per ton	0	6
150 tons and under 250 tons	per ton	0	7
250 tons and under 350 tons	per ton	0	9
350 tons and upwards.....	per ton	0	11

Swansea, continued.

Vessels driven in by stress of weather, and remaining over four tides, half the above rates. Vessels remaining over thirty days, unless prevented by embargo or weather, 1d. per ton per week.

Ballast Rates.

Register Tonnage.	Rates per ton on the quantity discharged.			
	s.	d.	s.	d.
Under 100 tons	0	5	at New Cut ..	0 6 in Dock
100 and under 150 tons	0	7	"	0 8 "
150 and under 200 tons	0	9	"	0 10 "
200 tons and upwards	0	11	"	1 0 "

Additional Charges.

	s.	d.
Discharged from any vessel into another vessel.....	0	9 per ton
Discharged into Lighters.....	1	6 "
Loaded into any vessel.....	0	6 "
Loaded into any vessel and discharged therefrom....	1	6 "

Towage,

In or Out, exclusive of Harbour Towages.

	£	s.	d.		£	s.	d.
Under 50 tons	0	7	6	425 and under	450	3	15 0
50 and under	75	0	10 0	450	475	4	0 0
75 "	100	0	12 6	475	500	4	5 0
100 "	125	0	15 0	500	525	4	10 0
125 "	150	0	17 6	525	550	4	15 0
150 "	175	1	0 0	550	575	5	0 0
175 "	200	1	5 0	575	600	5	5 0
200 "	225	1	10 0	600	650	5	10 0
225 "	250	1	15 0	650	700	5	15 0
250 "	275	2	0 0	700	750	6	0 0
275 "	300	2	5 0	750	800	6	5 0
300 "	325	2	10 0	800	850	6	10 0
325 "	350	2	15 0	850	900	6	15 0
350 "	375	3	0 0	900	950	7	0 0
375 "	400	3	5 0	950	1000	7	7 0
400 "	425	3	10 0				

All vessels above 1000 tons, 2d. per ton, new measurement.

If more than one Tug is required, half the above rates will be charged for each additional Tug.

Craneage

At Corporation Cranes, Public Quay.

	s.	d.
For every lift under 1 ton	0	3 per lift
Not exceeding 2 tons	0	3 "
2 to 5 tons	0	6 "
Five tons and upwards	2	0 "

*Swansea, continued.***Charges for use of five and ten ton Cranes,***Belonging to the Harbour Trustees.*

	£	s.	d.			£	s.	d.	
Under 1 ton ..	0	0	3	per lift	5 and under 6..	0	7	6	per lift
1 and under 2 ..	0	0	6	"	6 ..	0	10	0	"
2 ..	3	0	1	6	"	7 ..	0	12	6
3 ..	4	0	3	0	"	8 ..	0	15	0
4 ..	5	0	4	6	"	9 ..	1	0	0

No lift to exceed ten tons.

Pilotage.

Register Tonnage.			Inwards.			Outwards.			Total.		
			£	s.	d.	£	s.	d.	£	s.	d.
Vessels	50 tons and under	75	0	10	0	0	6	0	0	16	0
Vessels	75 tons and under	100	0	11	0	0	7	0	0	18	0
Vessels	100 tons and under	125	0	12	0	0	8	0	1	0	0
Vessels	125 tons and under	150	0	14	0	0	8	0	1	2	0
Vessels	150 tons and under	175	0	17	0	0	8	0	1	5	0
Vessels	175 tons and under	200	0	19	0	0	8	0	1	7	0
Vessels	200 tons and under	250	1	6	0	0	10	0	1	16	0
Vessels	250 tons and under	300	1	12	0	0	12	0	2	4	0
Vessels	300 tons and under	350	2	3	0	0	14	6	2	17	6
Vessels	350 tons and under	400	2	10	0	0	17	0	3	7	0
Vessels	400 tons and under	450	2	17	6	1	2	0	3	19	6
Vessels	450 tons and under	500	3	5	0	1	7	0	4	12	0
Vessels	500 tons and under	550	3	10	0	1	12	0	5	2	0
Vessels	550 tons and under	600	3	15	0	1	17	0	5	12	0
Vessels	600 tons and under	650	4	0	0	2	2	0	6	2	0
Vessels	650 tons and under	700	4	5	0	2	7	0	6	12	0
Vessels	700 tons and under	750	4	10	0	2	12	0	7	2	0
Vessels	750 tons and under	800	4	15	0	2	17	0	7	12	0
Vessels	800 tons and under	850	5	0	0	3	2	0	8	2	0
Vessels	850 tons and under	900	5	5	0	3	7	0	8	12	0
Vessels	900 tons and under	950	5	10	0	3	12	0	9	2	0
Vessels	950 tons and under	1000	5	15	0	3	17	0	9	12	0

Together with an additional sum of 5s. in respect of every 50 tons above 950 tons on the Inward Pilotage; and an additional sum of 5s. in respect of every 50 tons above 950 tons on the Outward Pilotage.

Pilots will take vessels over 500 tons register, Outward Bound, clear of the Green Grounds, or to the Mumbles Roads, and the above charge includes landing the Pilot in all cases.

Swansea, continued.

Vessels of 200 tons and upwards, if boarded beyond the following bearings, shall pay an additional Pilotage, as under:—

	W. of Pwldy Point, bearing N.N.E.		W. of Oxwich Point bearing N.N.E.S. of Sker Buoy, bearing N.N.E. or W.S.W.		W. of Worm's Head, bearing N.N.E.	
	s.	d.	s.	d.	£	s. d.
200 tons and under 300..	4	0	..	5 0	..	0 6 0
300 tons and under 400..	5	6	..	7 6	..	0 10 0
400 tons and under 500..	7	6	..	10 0	..	0 15 0
500 tons and under 600..	10	0	..	12 6	..	1 0 0
600 tons and under 700..	12	6	..	15 0	..	1 5 0
700 tons and upwards ..	15	0	..	18 6	..	1 10 0

One-half of the above Rates only to be paid and payable to every Pilot navigating or assisting any vessel (not entering Swansea Harbour) within any part of Swansea Bay, or within the limits of the Pilotage Ground hereinafter mentioned.

N.B.—Pilotage not compulsory upon vessels under 100 tons register, when entering or leaving Swansea Harbour in ballast; but if any Pilotage be required, only a licensed Pilot to be employed and the above rates to be paid.

OPTIONAL PILOTAGE.—Masters of vessels under 500 tons register requiring Pilots to take their vessels to the Mumbles Roads, or clear of the Green Grounds, to pay, in addition to the Outward Pilotage Rates, the following additional Rates, including landing.—

	s.	d.
Vessels under 100 tons	4	0
Vessels 100 tons and under 200.....	5	6
Vessels 200 tons and under 300.....	7	6
Vessels 300 tons and under 400.....	9	6
Vessels 400 tons and under 500.....	11	0

Masters of vessels requiring Pilots to take their vessels to the Eastern or Western Limits, to pay, in addition to the Outward Rates, the following additional rates, including landing:—

	£	s.	d.
Vessels 300 tons and under 500	3	0	0
Vessels 500 tons and under 700	4	0	0
Vessels 700 tons and under 900	5	0	0
Vessels 900 tons and upwards	6	0	0

The following shall be deemed to be the limits of the Pilotage Ground of Pilots appointed and licensed by the Swansea Harbour Trustees, viz.:—"North of the line of the Nash Lights in one!" and "east of an imaginary line running north and south of a point, four miles westward of the Helwick light vessel, placed off the Helwick Shoal, near the Worm's Head, in the County of Glamorgan."

Swansea, continued.

Every Pilot required to remain on board a vessel, whether inward or outward bound, to be paid by the Master of such vessel, at the rate of 4s. for every twelve hours, or broken portion of twelve hours, in which such Pilot shall not have earned pilotage or distance-money, in the same vessel.

Harbour Pilotage.

	s.	d.
Vessels under 10 tons	2	6
Vessels 100 tons and under 200.....	3	6
Vessels 200 tons and under 400.....	5	0
Vessels 400 tons and under 500.....	7	6
Vessels 500 tons and upwards	12	0

If the Master of any vessel shall require any Pilot to go on board and take his vessel out of the Harbour, transport or move her, and such vessel be not ready to be taken out or moved, half the rates last mentioned shall be paid to the Pilot.

Masters of vessels requiring Hobbler or Boats, to assist in removing vessels within the Harbour, shall pay each Hobbler employed, 2s., and for each boat, 2s.

TENBY.**Tonnage Rates.**

Vessels discharging	3d. per ton register
Vessels wind bound	1½d. „
Yachts	2d. „ or 6d. per ton yearly,
Trawlers.....	2d. „ or 40s yearly.

Pilot Boats exempt.

WATCHET.

Harbour Dues.—One halfpenny per ton registered tonnage.

VALUE IN BRITISH CURRENCY OF THE MONEYS OF ALL NATIONS.

AMERICA, U.S.	£	s.	d.
Eagle	2	1	0
Half Eagle	1	0	6
Dollar	0	4	2

AUSTRIA.

Ducat.....	0	9	4
Silver Florin.....	0	2	0
Dollar.....	0	4	0
Zwanzigr, 20 Kreutzers ...	0	0	8

BREMEN.	£	s.	d.
Louis d'or	0	16	0
Gold Rigsbank Dollar	0	3	4
36 Groas Piece	0	1	6

BELGIUM.

Gold Leopold	0	19	10
— 10 Franc Piece	0	7	10
Silver 5 Franc.....	0	3	11
— 1 Franc.....	0	0	9½

BRAZILS.

	£	s.	d.
Gold Piece, 6400 Reis	1	15	9
4000 —	1	0	0
Silver ditto, 1200 —	0	4	2
960 —	0	4	1
640 —	0	2	9
320 —	0	1	4
200 —	0	0	8

DENMARK.

Christian d'or	0	16	3
Silver Species	0	4	4
Rigsbank Daler	0	2	2
Mark	0	0	4½

EGYPT.

Gold New Sequin	0	10	4
Silver New Piastre	0	3	4
Grush	0	1	2

EAST INDIES.

Gold Mohur	1	9	0
Sicca Rupee	0	1	10½

FRANCE.

Gold Napoleon	0	16	0
Silver 5-Franc Piece	0	4	0
Franc	0	0	9½

GREECE

40-Drachmi Gold Piece	1	10	6
Five ditto	0	3	9
1 Drachmi, 100 Leplas	0	0	8½

GERMANY.

Gold Louis d'or	0	16	1
Ducat	0	9	3
Silver Crown	0	4	4
Florin	0	1	8

HOLLAND.

Gold 10-Florin Piece	0	16	6
Ducat	0	9	3
Silver Florin or Guilder	0	1	8

HAMBURG and LUBEC.

Ducat	0	9	3
Dollar	0	4	4
Mark	0	1	2½

HANOVER, BRUNSWICK, &c.

Gold George d'or Double	1	12	4
Ditto, Single	0	16	2
Thaler, 30 Groschen	0	2	11

MEXICO.

Gold Doubloon	3	5	0
Half ditto	1	12	6
Quarter ditto	0	16	3
Sixteenth ditto	0	4	0
Silver Dollar	0	4	2
Half ditto	0	2	1
Quarter ditto	0	1	0½
Eighth ditto	0	0	6½

NAPLES.

	£	s.	d.
Gold Piece of 30 Ducats	5	0	0
Silver Ducat	0	3	4
Dollar	0	4	0

NORWAY.

Spanish Dollar	0	4	4
Rigsbank Dollar	0	2	2
Mark	0	0	9½

POLAND.

Gold Ducat	0	9	0
Rix Dollar	0	4	0
Florin	0	0	5½

PORTUGAL.

Gold Joannose, 1000 Reis	1	16	0
Silver Crown, 100 Reis	0	4	8
Crusado 400 Reis	0	2	3

PRUSSIA.

Gold Frederick	0	16	9
Silver Thaler	0	3	0
Silbergroschen	0	0	1½

ROME.

Gold 10-Scudi Piece	2	2	6
Silver Scudo, 10 Paoli	0	4	2
Paoli, 10 Bajochi	0	0	5

RUSSIA.

Gold Half Imperial	0	16	3
Ducat	0	9	2
Silver Rouble	0	3	2

SAXONY.

August d'or	0	16	2
Thaler Specie	0	3	11
Currency	0	3	0

SPAIN.

Gold Doubloon	3	6	6
Pistole	0	16	6
Silver Dollar	0	4	3

SWEDEN.

Gold Ducat	0	9	2
Silver Species	0	4	4
Half Species	0	2	2
Rix Dollar Banco, 48 Sk.	0	1	8

SWITZERLAND.

Gold Double Pistole	1	17	0
Four-Franc Piece	0	4	8
1-Franc do., 10 Batzen	0	1	1½

TURKEY.

Gold New Double Sequin	1	16	0
Sequin	0	18	0
Spanish Dollar	0	4	2
Piastre, 40 Paras	0	0	2½

TIDAL CONSTANTS.

By the following Table, the time of High Water may be found in *Local Mean Time*, for any day of the year, by *adding to or subtracting from* the various Ports of reference.

GREAT BRITAIN.

West Coast, &c.				East Coast, &c.				
		H.	M.			H.	M.	
St. Ives	sub.	1	48	From Milford Haven.	Inverness	sub.	1 49	
Newquay	sub.	1	28		Aberdeen	sub.	1 7	
Padstow	sub.	1	19		Dundee	add	0 25	
Boscastle	sub.	1	17		Perth	add	1 28	
Budehaven	sub.	0	58		Leith	add	0 10	
Lundy Island ..	sub.	1	17		Berwick	add	0 11	
Barnstaple Bridge	add	0	41		Blyth	add	1 8	
Appledore	add	0	11		Tynemouth Bar ..	add	1 13	
Bideford	add	0	20		North Shields ..	add	1 16	
Minehead	sub.	1	12		Newcastle	add	2 16	
Bridgewater Bar ..	sub.	0	52	To or from London.	Sunderland	add	1 15	
Weston-super-Mare	sub.	0	48		Seaham	add	1 17	
Flatholm Island ..	sub.	0	48		Hartlepool	add	1 21	
Portishead	sub.	0	15		Whitby	add	1 38	
Kingroad	sub.	0	35		Scarborough	add	2 4	
Chepstow	sub.	0	1		Flamborough head	add	2 23	
Carmarthen Bar ..	sub.	0	22		Great Grimsby ..	add	3 29	
Tenby	sub.	0	32		Hull	add	4 19	
St. Ann's lighthouse	sub.	0	36		Goole	add	5 37	
Fishguard	add	0	24		To or from Milford Haven.	Lynn	add	3 53
Cardigan	add	0	29	Yarmouth Road ..		sub.	4 52	
Newquay	add	0	58	Lowestoft		sub.	4 10	
Aberystwith	add	0	59	Orfordness		sub.	2 52	
Aberdovey	add	1	28	Margate		sub.	2 27	
Port Madoc	add	0	58	Nore		sub.	1 37	
Caernarvon	sub.	2	2	Chatham		sub.	1 5	
Holyhead	sub.	1	24	Gravesend		sub.	0 57	
Amlwch	sub.	1	5	Woolwich		sub.	0 30	
Beaumaris	sub.	1	3	London Docks ..		sub.	0 10	
Chester	sub.	1	5	To or from Liverpool.	South Coast.			
Fleetwood	sub.	0	23		Ramsgate	add	5 12	To Milford Haven.
Whitehaven	sub.	0	21		Deal	add	4 43	
Douglas, I. of Man	sub.	0	23		Folkestone	add	4 35	
Ramsey	sub.	0	23		Hastings	add	4 21	
Peel	sub.	0	27		Beachy Head ..	add	4 48	
Kircudbright ..	sub.	0	25		Shoreham	add	5 2	
Ardrossan	add	0	10					
Glasgow	add	1	50					

Tidal Constants, continued.

	H.	M.		H.	M.	
Arundel Bar ..	add	5	3	Lyme Regis ..	sub.	0 11
Littlehampton ..	add	5	4	Exmouth ..	sub.	0 11
Chichester ..	add	4	58	Torbay ..	sub.	0 32
Bembridge Point ..	add	4	28	Teignmouth ..	sub.	0 32
Portsmouth ..	add	5	9	Dartmouth ..	sub.	0 16
Southampton ..	add	3	58	Devonport ..	sub.	0 49
West Cowes ..	add	4	13	Plymouth Break ..	sub.	0 55
Yarmouth ..	add	3	28	Fowey ..	sub.	1 18
Needles Point ..	add	3	14	Mevagizey ..	sub.	1 28
Christchurch ..	add	2	28	Falmouth ..	sub.	1 35
Poole ..	add	2	38	Lizard ..	sub.	1 32
Portland ..	add	0	29	Penzance ..	sub.	2 2
Bridport ..	sub.	0	27	Scilly I. (St. Mary)	sub.	2 5

To or from Milford Haven.

From Milford Haven.

IRELAND.

Skull ..	sub.	2	30	Tor Point ..	sub.	1	55
Crookhaven ..	sub.	2	23	Lough Larne ..	sub.	0	47
Dunmanus Harb.	sub.	2	35	Belfast ..	sub.	0	52
Dunbeacon ..	sub.	2	41	Donaghadee ..	sub.	0	22
Black Ball harbour	sub.	2	52	Lough Strangford	sub.	0	42
Castletown ..	sub.	2	18	Warren Point ...	sub.	0	25
Bantry Harbour ..	sub.	2	45	Carlingford Bar ..	sub.	0	55
West Cove ..	sub.	2	40	Howth Harbour ..	sub.	0	26
Valentia Harbour	sub.	2	50	Dublin Bar ..	sub.	0	23
Kilbaba ..	sub.	2	16	Kingstown ..	sub.	0	25
Kilrush ..	sub.	1	50	Wicklow ..	sub.	1	6
Carrigaholt ..	sub.	1	48	Arklow ..	sub.	2	50
Tarbert ..	sub.	1	35	Wexford ..	add	0	49
Foyne's Island ..	sub.	0	57	New Ross ..	sub.	0	28
Mellon ..	sub.	0	31	Waterford (bridge)	sub.	0	26
Limerick ..	sub.	0	16	Do. (Duncan fort)	sub.	1	12
Galway ..	sub.	1	57	Drummore ..	sub.	1	5
Roundstone ..	sub.	2	4	Ballinacourty, Dun-			
Achillbeg ..	sub.	1	18	garven ..	sub.	1	20
Broadhaven Harb.	sub.	1	32	Youghal ..	sub.	1	18
Westport ..	sub.	1	35	Ballycottin ..	sub.	1	38
Sligo Bay ..	sub.	1	14	Cork ..	sub.	1	34
Donegal Harbour	sub.	1	14	Queenstown ..	sub.	1	31
Killibegs ..	sub.	1	16	Kinsale ..	sub.	1	49
Lough Rossmore	sub.	1	12	Courtmaeskerry ..	sub.	1	56
Sheephaven ..	sub.	1	0	Castletownsend ..	sub.	2	11
Londonderry ..	add	1	29	Baltimore ..	sub.	2	9
Coleraine ..	sub.	0	8	Cape Clear ..	sub.	2	32

To or from Milford Haven.

From Liverpool.

To or from Milford Haven.

Tidal Constants, continued.
FOREIGN AND COLONIAL.

	H. M.		H. M.
Adelaide, port, Aus.	sub. 0 48	Ichabo	sub. 5 32
Aden, Arabia ..	add 3 13	Jackson, Port ..	add 1 43
Auckland	add 0 33	Jersey, St. Helier	sub. 4 7
Bayonne Bar. Fr.	sub. 2 47	Malaga	add 5 28
Bilboa, Spain ..	sub. 3 32	Malo, St.	sub. 0 27
Bombay	add 5 8	Melbourne	sub. 5 12
Bordeaux	add 0 18	Moreton Bay ..	add 2 28
Boston, U.S. ..	add 4 55	Natal, Port.. ..	sub. 2 2
Botany Bay	add 1 43	Nelson, New Zea.	add 3 18
Boulogne	add 4 53	New York	add 1 41
Brest	sub. 2 45	Oporto	sub. 4 2
Buenos Ayres ..	add 5 28	Ostend	add 5 53
Cadiz, Spain ..	sub. 4 47	Pernambuco ..	sub. 2 9
Calais	add 5 17	Philadelphia ..	sub. 5 14
Calcutta	sub. 4 2	Philip, Port, entr.	sub. 5 2
Callao Bay	sub. 0 45	Portland, U.S. ..	add 4 53
Canton River, ent.	add 3 28	Quebec	add 0 6
Charlestown, U.S.	add 0 41	Richmond, U.S...	sub. 2 4
Charbourg	add 1 17	Rio Janeiro ..	sub. 3 32
Copiapo	add 1 58	Rochelle	sub. 3 1
Coquimbo	add 2 36	Royal, Port.. ..	add 4 28
Deleware, U.S. ..	add 1 28	Rotterdam	sub. 2 47
Dieppe	add 4 34	Rouen.. ..	sub. 4 4
Francisco, San ..	add 4 2	Savannah, City ..	add 1 41
Galle, Point de ..	sub. 4 32	Senegal	add 3 58
Gambia River ..	add 1 38	Singapore	add 3 13
Geelong	sub. 3 42	Suez Bay	sub. 4 32
Gibraltar	sub. 4 12	Sidney, Australia	add 2 6
Guernsey, St. Peter	add 0 16	Table Bay	sub. 3 52
Hamburg	sub. 1 3	Tangier	sub. 4 50
Hong Kong	add 3 43	Ushant	sub. 3 0
Horn, Cape	sub. 2 22	Valparaiso	add 3 0

To or from Milford Haven.

To or from Milford Haven.

MOON'S RISING AND SETTING.

At four days old it sets at, and shines till, about 10 at night.	16 at a quarter after.....	7
5 about 11	17 at half after	8
6 about 12	18 about 10	
7 at near 1 in the morning.	19 about 11	
14 at full it rises about 6 in the evening.	20 about 12	

THE
BRISTOL CHANNEL
ALMANACK
AND
TIDE TABLES;
TOGETHER WITH
PORT CHARGES,
PILOTAGE REGULATIONS,
&c., &c.,
FOR THE YEAR
1868.

This Year's issue contains important additions of Astronomical Tables, sufficient for all ordinary purposes of Navigation.

ENTERED AT STATIONERS' HALL.

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SIMPKIN, MARSHALL & CO., STATIONERS' HALL COURT.

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NOTICE.

The Port Charges, and other information, have been collected with as much care as circumstances would permit, but should any errors or omissions be discovered, the Publishers will be glad to have them pointed out, that they may be corrected in future years; and any suggestions for the improvement of the work will also be gladly received, as it is their desire to make it in every respect as accurate and complete as possible.

The work comprises :—

Calendar and Astronomical Tables ...pages	4 to 15
Tide Tables	pages 18 to 65
Port Charges, &c. ....pages	66 to 103
Tidal Constants	pages 103 to 106

Swansea, Nov., 1867.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.		Sideral Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S								Equation of Time.	Diff. for 1 hour			
					Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter.†									
h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s		
1	Wed	4	57.2	1	11	18	45	20	23	2	42	S	11.96	16	18	3 37	1.189
2	Thu	5	41.9	1	11	18	49	44	22	57	41		13.11	16	18	4 5	1.174
3	Fri	6	28.1	1	11	18	54	9	22	52	13		14.25	16	18	4 33	1.158
4	Sat	7	16.6	1	11	18	58	33	22	46	18		15.38	16	18	5 0	1.141
5	Sun	8	8.3	1	11	19	2	57	22	39	55		16.51	16	18	5 28	1.123
6	Mon	9	3.8	1	11	19	7	20	22	33	6		17.63	16	18	5 54	1.104
7	Tue	10	3.0	1	11	19	11	43	22	25	50		18.74	16	18	6 21	1.084
8	Wed	11	5.1	1	11	19	16	5	22	18	7		19.84	16	18	6 46	1.062
9	Thu	12	8.4	1	11	19	20	27	22	9	58		20.93	16	18	7 12	1.040
10	Fri	13	10.6	1	10	19	24	48	22	1	23		22.01	16	18	7 36	1.017
11	Sat	14	10.4	1	10	19	29	9	21	52	22		23.07	16	18	8 0	0.993
12	Sun	15	6.7	1	10	19	33	29	21	42	56		24.13	16	18	8 24	0.968
13	Mon	15	59.7	1	10	19	37	49	21	33	4		25.18	16	18	8 47	0.943
14	Tue	16	50.0	1	10	19	42	7	21	22	48		26.22	16	18	9 9	0.917
15	Wed	17	38.4	1	10	19	46	26	21	12	7		27.24	16	18	9 31	0.890
16	Thu	18	25.6	1	10	19	50	43	21	1	1		28.25	16	18	9 52	0.863
17	Fri	19	12.3	1	10	19	55	0	20	49	31		29.25	16	18	10 12	0.835
18	Sat	19	59.1	1	10	19	59	16	20	37	37		30.23	16	17	10 32	0.806
19	Sun	20	46.2	1	10	20	3	32	20	25	20		31.21	16	17	10 51	0.777
20	Mon	21	33.7	1	10	20	7	47	20	12	40		32.16	16	17	11 9	0.747
21	Tue	22	21.4	1	10	20	12	1	19	59	37		33.10	16	17	11 27	0.716
22	Wed	23	8.9	1	9	20	16	14	19	46	12		34.03	16	17	11 44	0.684
23	Thu	23	55.8	1	9	20	20	27	19	32	24		34.94	16	17	12 0	0.652
24	Fri	conjunc		1	9	20	24	39	19	18	15		35.84	16	17	12 15	0.619
25	Sat	0	42.0	1	9	20	28	50	19	3	45		36.72	16	17	12 29	0.585
26	Sun	1	27.3	1	9	20	33	0	18	48	53		37.58	16	17	12 43	0.552
27	Mon	2	11.7	1	9	20	37	9	18	33	42		38.42	16	17	12 56	0.518
28	Tue	2	55.8	1	9	20	41	18	18	18	10		39.26	16	16	13 8	0.484
29	Wed	3	39.9	1	9	20	45	26	18	2	18		40.07	16	16	13 19	0.449
30	Thu	4	24.7	1	9	20	49	33	17	46	7		40.86	16	16	13 29	0.414
31	Fri	5	11.0	1	8	20	53	39	17	29	37		41.65	16	16	13 39	0.379

Subtract from Mean Time.

* Mean Time maybe found by subtracting 0s.19 from the *Sideral*.† The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.	Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S				Equation of Time.	Diff. for 1 hour
				Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter.‡		
		h m	m s	h m s	° ' "	"	' "	m s	s
1 Sat		5 59.7	1 8	20 57 44	17 12 48 S	42.41	16 16	13 48	0.344
2 Sun		6 51.4	1 8	21 1 48	16 55 42	43.16	16 16	13 56	0.309
3 Mon		7 46.5	1 8	21 5 52	16 38 17	43.89	16 15	14 3	0.274
4 Tue		8 45.0	1 8	21 9 55	16 20 36	44.60	16 15	14 9	0.239
5 Wed		9 46.0	1 8	21 13 56	16 2 37	45.29	16 15	14 14	0.205
6 Thu		10 48.0	1 8	21 17 58	15 44 22	45.97	16 15	14 19	0.170
7 Fri		11 49.2	1 8	21 21 58	15 25 51	46.63	16 15	14 22	0.136
8 Sat		12 48.2	1 7	21 25 57	15 7 4	47.28	16 15	14 25	0.103
9 Sun		13 44.4	1 7	21 29 56	14 48 2	47.90	16 15	14 27	0.070
10 Mon		14 37.9	1 7	21 33 54	14 28 45	48.51	16 14	14 28	0.037
11 Tue		15 29.0	1 7	21 37 51	14 9 14	49.11	16 14	14 29	0.005
12 Wed		16 18.4	1 7	21 41 47	13 49 28	49.69	16 14	14 29	0.026
13 Thu		17 6.8	1 7	21 45 43	13 29 29	50.25	16 14	14 28	0.057
14 Fri		17 54.7	1 7	21 49 37	13 9 17	50.79	16 14	14 26	0.086
15 Sat		18 42.4	1 7	21 53 32	12 48 51	51.32	16 13	14 24	0.117
16 Sun		19 30.1	1 7	21 57 25	12 28 13	51.83	16 13	14 20	0.146
17 Mon		20 17.8	1 7	22 1 18	12 7 23	52.32	16 13	14 16	0.175
18 Tue		21 5.3	1 6	22 5 10	11 46 22	52.80	16 13	14 12	0.204
19 Wed		21 52.4	1 6	22 9 11	11 25 9	53.25	16 13	14 7	0.232
20 Thu		22 38.8	1 6	22 12 52	11 3 46	53.69	16 12	14 1	0.260
21 Fri		23 24.6	1 6	22 16 42	10 42 12	54.12	16 12	13 54	0.287
22 Sat	conjunc		1 6	22 20 31	10 20 28	54.52	16 12	13 47	0.314
23 Sun		0 9.6	1 6	22 24 20	9 58 35	54.91	16 12	13 39	0.340
24 Mon		0 54.2	1 6	22 28 8	9 36 33	55.27	16 11	13 31	0.365
25 Tue		1 38.6	1 6	22 31 55	9 14 21	55.62	16 11	13 22	0.390
26 Wed		2 23.5	1 6	22 35 42	8 52 2	55.96	16 11	13 12	0.415
27 Thu		3 9.4	1 6	22 39 28	8 29 35	56.28	16 11	13 2	0.439
28 Fri		3 56.9	1 6	22 43 14	8 7 1	56.58	16 10	12 51	0.462
29 Sat		4 46.7	1 5	22 46 59	7 44 19	56.86	16 10	12 40	0.484

Subtract from Mean Time.

* Mean Time may be found by subtracting 0^s.18 from the *Sidereal*.‡ The Semidiameter for *Apparent* Noon may be assumed the same as that for *Mean* Noon.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage		Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S								Equation of Time.	Diff. for 1 hour				
					Apparent Right Ascension.		Apparent Declination.		Diff. for 1 hour	Semi- diam- eter.‡								
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s	
1	Sun	5	39.1	1	5	22	50	44	7	21	31	S	57.13	16	10	12	28	0.506
2	Mon	6	34.5	1	5	22	54	28	6	58	37		57.38	16	10	12	15	0.527
3	Tue	7	32.2	1	5	22	58	12	6	35	36		57.61	16	10	12	2	0.548
4	Wed	8	31.5	1	5	23	1	55	6	12	51		57.83	16	9	11	49	0.567
5	Thu	9	31.0	1	5	23	5	38	5	49	20		58.03	16	9	11	35	0.585
6	Fri	10	29.7	1	5	23	9	20	5	26	5		58.21	16	9	11	21	0.604
7	Sat	11	26.5	1	5	23	13	2	5	2	45		58.38	16	9	11	6	0.621
8	Sun	12	21.4	1	5	23	16	43	4	39	22		58.54	16	8	10	51	0.637
9	Mon	13	14.3	1	5	23	20	24	4	15	55		58.68	16	8	10	36	0.652
10	Tue	14	5.6	1	5	23	24	5	3	52	25		58.80	16	8	10	20	0.665
11	Wed	14	55.9	1	5	23	27	46	3	28	52		58.91	16	8	10	4	0.678
12	Thu	15	45.4	1	5	23	31	26	3	5	17		59.01	16	7	9	47	0.690
13	Fri	16	34.5	1	5	23	35	6	2	41	39		59.09	16	7	9	31	0.700
14	Sat	17	23.4	1	5	23	38	45	2	18	0		59.16	16	7	9	14	0.710
15	Sun	18	11.9	1	5	23	42	25	1	54	19		59.21	16	6	8	57	0.719
16	Mon	18	59.9	1	5	23	46	4	1	30	37		59.25	16	6	8	39	0.727
17	Tue	19	47.3	1	5	23	49	43	1	6	54		59.27	16	6	8	22	0.734
18	Wed	20	34.0	1	5	23	53	22	0	43	12		59.27	16	6	8	4	0.741
19	Thu	21	20.0	1	5	23	57	0	0	19	29	S	59.26	16	5	7	46	0.746
20	Fri	22	5.3	1	4	0	0	35	0	4	13	N	59.23	16	5	7	28	0.752
21	Sat	22	50.1	1	4	0	4	17	0	27	55		59.19	16	5	7	10	0.756
22	Sun	23	35.0	1	4	0	7	56	0	51	35		59.14	16	4	6	52	0.759
23	Mon	conjunc		1	4	0	11	34	1	15	14		59.06	16	4	6	34	0.762
24	Tue	0	20.2	1	4	0	15	12	1	38	50		58.97	16	4	6	15	0.764
25	Wed	1	6.4	1	4	0	18	50	2	2	25		58.87	16	4	5	57	0.765
26	Thu	1	54.1	1	4	0	22	29	2	25	57		58.75	16	3	5	39	0.766
27	Fri	2	43.7	1	4	0	26	7	2	49	26		58.61	16	3	5	20	0.766
28	Sat	3	35.7	1	4	0	29	45	3	12	51		58.46	16	3	5	2	0.763
29	Sun	4	30.0	1	4	0	33	23	3	36	12		58.30	16	3	4	43	0.764
30	Mon	5	26.4	1	4	0	37	1	3	59	30		58.12	16	2	4	25	0.761
31	Tue	6	23.9	1	4	0	40	40	4	22	43		57.93	16	2	4	7	0.758

Subtract from Mean Time.

Mean Time may be found by subtracting 0s.18 from the Sideral.

† The Semidiameter for Apparent Noon may be assumed the same as that for Mean Noon.

APRIL, 1868.

7

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.		Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S							Equation of Time.	Diff. for 1 hour						
					Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter.†											
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s		
1	Wed	7	21	7	1	4	0	44	18	4	45	51	N	57	72	16	2	3 49	0 755
2	Thu	8	18	7	1	5	0	47	57	5	8	54		57	49	16	1	3 31	0 750
3	Fri	9	14	4	1	5	0	51	35	5	31	51		57	25	16	1	3 13	0 745
4	Sat	10	8	4	1	5	0	55	14	5	54	43		57	00	16	1	2 55	0 739
5	Sun	11	1	0	1	5	0	58	53	6	17	28		56	74	16	1	2 37	0 732
6	Mon	11	52	4	1	5	1	2	32	6	40	6		56	46	16	0	2 20	0 723
7	Tue	12	43	0	1	5	1	6	11	7	2	38		56	16	16	0	2 2	0 714
8	Wed	13	33	3	1	5	1	9	51	7	25	3		55	86	16	0	1 45	0 704
9	Thu	14	23	5	1	5	1	13	30	7	47	20		55	54	16	0	1 29	0 693
10	Fri	15	13	4	1	5	1	17	10	8	9	29		55	21	15	59	1 12	0 681
11	Sat	16	3	1	1	5	1	20	51	8	31	30		54	86	15	59	0 56	0 669
12	Sun	16	52	2	1	5	1	24	32	8	53	23		54	50	15	59	0 40	0 655
13	Mon	17	40	5	1	5	1	28	12	9	15	7		54	13	15	58	0 24	0 641
14	Tue	18	27	8	1	5	1	31	54	9	36	42		53	75	15	58	0 9	0 626
15	Wed	19	14	0	1	5	1	35	36	9	58	7		53	34	15	58	0 6	0 611
16	Thu	19	59	4	1	5	1	39	18	10	19	23		52	92	15	58	0 20	0 595
17	Fri	20	44	2	1	5	1	43	0	10	40	28		52	50	15	57	0 34	0 578
18	Sat	21	28	8	1	5	1	46	43	11	1	23		52	06	15	57	0 48	0 561
19	Sun	22	13	8	1	5	1	50	26	11	22	8		51	60	15	57	1 1	0 554
20	Mon	22	59	9	1	5	1	54	10	11	42	41		51	13	15	57	1 14	0 527
21	Tue	23	47	5	1	5	1	57	54	12	3	2		50	65	15	56	1 26	0 508
22	Wed	conjunc			1	5	2	1	39	12	23	12		50	15	15	56	1 38	0 489
23	Thu	0	37	3	1	5	2	5	24	12	43	10		49	63	15	56	1 50	0 469
24	Fri	1	29	6	1	6	2	9	9	13	2	55		49	10	15	56	2 1	0 449
25	Sat	2	24	4	1	6	2	12	55	13	22	27		48	56	15	55	2 11	0 429
26	Sun	3	21	3	1	6	2	16	42	13	41	46		48	01	15	55	2 21	0 409
27	Mon	4	19	3	1	6	2	20	29	14	0	51		47	44	15	55	2 31	0 389
28	Tue	5	17	3	1	6	2	24	16	14	19	43		46	85	15	55	2 40	0 369
29	Wed	6	14	2	1	6	2	28	4	14	38	21		46	25	15	54	2 49	0 348
30	Thu	7	9	3	1	6	2	31	53	14	56	43		45	64	15	54	2 57	0 326

Subtract from Mean Time.

Add to Mean Time.

* Mean Time may be found by subtracting 0^s.18 from the *Sidereal*.
 † The Semidiameter for *Apparent* Noon may be assumed the same as that for *Mean* Noon.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.		Sideral Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S							Equation of Time.	Diff. for 1 hour					
					Apparent Right Ascension.	Apparent Declination.			Diff. for 1 hour	Semi- diam- eter. ‡								
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s	
1	Fri	8	2.5	1	6	2	35	42	15	14	51	N	45.02	15	54	3	4	0.305
2	Sat	8	54.0	1	6	2	39	31	15	32	44		44.38	15	54	3	11	0.283
3	Sun	9	44.4	1	6	2	43	21	15	50	22		43.73	15	53	3	18	0.261
4	Mon	10	34.0	1	6	2	47	12	16	7	43		43.06	15	53	3	24	0.239
5	Tue	11	23.6	1	6	2	51	3	16	24	49		42.39	15	53	3	29	0.215
6	Wed	12	13.3	1	6	2	54	54	16	41	38		41.70	15	53	3	34	0.191
7	Thu	13	3.2	1	7	2	58	47	16	58	10		41.00	15	52	3	39	0.167
8	Fri	13	53.5	1	7	3	2	39	17	14	26		40.29	15	52	3	42	0.143
9	Sat	14	43.4	1	7	3	6	33	17	30	24		39.57	15	52	3	46	0.119
10	Sun	15	32.6	1	7	3	10	27	17	46	5		38.83	15	52	3	48	0.095
11	Mon	16	20.8	1	7	3	14	21	18	1	28		38.09	15	52	3	50	0.071
12	Tue	17	7.7	1	7	3	18	17	18	16	33		37.33	15	51	3	51	0.046
13	Wed	17	53.4	1	7	3	22	12	18	31	20		36.56	15	51	3	52	0.021
14	Thu	18	38.1	1	7	3	26	9	18	45	48		35.78	15	51	3	52	0.003
15	Fri	19	22.3	1	7	3	30	6	18	59	57		34.99	15	51	3	52	0.027
16	Sat	20	6.5	1	7	3	34	3	19	13	47		34.18	15	51	3	51	0.052
17	Sun	20	51.5	1	7	3	38	1	19	27	18		33.36	15	50	3	50	0.076
18	Mon	21	38.0	1	7	3	42	0	19	40	29		32.54	15	50	3	48	0.100
19	Tue	22	26.8	1	8	3	45	59	19	53	20		31.70	15	50	3	45	0.123
20	Wed	23	18.5	1	8	3	49	59	20	5	50		30.85	15	50	3	42	0.146
21	Thu	conjunc		1	8	3	53	59	20	18	0		29.99	15	50	3	38	0.169
22	Fri	0	13.3	1	8	3	58	0	20	29	49		29.12	15	49	3	33	0.191
23	Sat	1	10.9	1	8	4	2	2	20	41	18		28.24	15	49	3	29	0.213
24	Sun	2	10.4	1	8	4	6	3	20	52	25		27.35	15	49	3	23	0.234
25	Mon	3	10.3	1	8	4	10	6	21	3	10		26.45	15	49	3	17	0.254
26	Tue	4	9.2	1	8	4	14	9	21	13	34		25.54	15	49	3	11	0.273
27	Wed	5	5.8	1	8	4	18	12	21	23	36		24.62	15	49	3	4	0.291
28	Thu	5	59.9	1	8	4	22	16	21	33	15		23.69	15	48	2	57	0.310
29	Fri	6	51.7	1	8	4	26	20	21	42	32		22.74	15	48	2	49	0.328
30	Sat	7	41.6	1	8	4	30	25	21	51	27		21.80	15	48	2	41	0.345
31	Sun	8	30.5	1	8	4	34	30	21	59	58		20.84	15	48	2	33	0.361

Add to Mean Time.

* Mean Time may be found by subtracting 0^s.18 from the *Sideral*.‡ The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.		Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S								Equation of Time.	Diff. for 1 hour			
					Apparent Right Ascension.			Apparent Declination.			Diff. for 1 hour	Semi- diam- eter.‡					
		h	m		s	h	m	s	°	'	"	"			'	"	m	s	s
1	Mon	9	18·9	1	8	4	38	35	22	8	7 N	19·87	15	48	2	24	0·377
2	Tue	10	7·5	1	8	4	42	41	22	15	52	18·91	15	48	2	15	0·393
3	Wed	10	56·6	1	9	4	46	47	22	23	15	17·94	15	48	2	5	0·409
4	Thu	11	46·2	1	9	4	50	54	22	30	13	16·96	15	48	1	55	0·423
5	Fri	12	36·0	1	9	4	55	1	22	36	48	15·97	15	48	1	45	0·436
6	Sat	13	25·6	1	9	4	59	8	22	43	0	14·98	15	47	1	34	0·450
7	Sun	14	14·4	1	9	5	3	15	22	48	47	13·98	15	47	1	23	0·463
8	Mon	15	2·1	1	9	5	7	23	22	54	11	12·98	15	47	1	12	0·474
9	Tue	15	48·3	1	9	5	11	31	22	59	10	11·97	15	47	1	1	0·485
10	Wed	16	33·3	1	9	5	15	39	23	3	45	10·96	15	47	0	49	0·495
11	Thu	17	17·2	1	9	5	19	48	23	7	56	9·95	15	47	0	37	0·504
12	Fri	18	0·8	1	9	5	23	57	23	11	43	8·93	15	47	0	25	0·513
13	Sat	18	44·5	1	9	5	28	6	23	15	5	7·91	15	47	0	12	0·520
14	Sun	19	29·3	1	9	5	32	15	23	18	2	6·88	15	47	0	0	0·527
15	Mon	20	16·0	1	9	5	36	24	23	20	35	5·85	15	47	0	13	0·533
16	Tue	21	5·5	1	9	5	40	34	23	22	43	4·83	15	46	0	26	0·537
17	Wed	21	58·4	1	9	5	44	43	23	24	27	3·80	15	46	0	39	0·541
18	Thu	22	54·9	1	9	5	48	53	23	25	45	2·76	15	46	0	52	0·544
19	Fri	23	54·5	1	9	5	53	2	23	26	39	1·73	15	46	1	5	0·545
20	Sat	conjunc		1	9	5	57	12	23	27	9	0·70	15	46	1	18	0·546
21	Sun	0	55·9	1	9	6	1	22	23	27	13	0·33	15	46	1	31	0·545
22	Mon	1	57·4	1	9	6	5	31	23	26	53	1·37	15	46	1	44	0·543
23	Tue	2	57·1	1	9	6	9	41	23	26	7	2·40	15	46	1	57	0·539
24	Wed	3	54·0	1	9	6	13	50	23	24	58	3·43	15	46	2	10	0·534
25	Thu	4	48·0	1	9	6	17	59	23	23	23	4·46	15	46	2	23	0·528
26	Fri	5	39·4	1	9	6	22	9	23	21	24	5·49	15	46	2	35	0·521
27	Sat	6	28·9	1	9	6	26	18	23	19	0	6·52	15	46	2	48	0·514
28	Sun	7	17·3	1	9	6	30	26	23	16	11	7·54	15	46	3	0	0·505
29	Mon	8	5·3	1	9	6	34	35	23	12	58	8·55	15	46	3	12	0·496
30	Tue	8	53·6	1	9	6	38	43	23	9	21	9·57	15	46	3	24	0·486

* Mean Time may be found by subtracting 0s·19 from the *Sidereal*.† The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's		Sideral Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S						Equation of Time.	Diff. for 1 hour										
		Southing	or Meridian Passage.		Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter.‡														
1	Wed	h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s					
2	Thu	9	42	3	1	9	6	42	51	23	5	19	N	10	58	15	46	3	35	0	475	
3	Fri	10	31	4	1	9	6	46	59	23	0	53		11	59	15	46	3	47	0	463	
4	Sat	11	20	7	1	9	6	51	7	22	56	3		12	59	15	46	3	58	0	450	
5	Sun	12	9	6	1	9	6	55	14	22	50	49		13	58	15	46	4	8	0	436	
6	Mon	12	57	7	1	9	6	59	21	22	45	11		14	57	15	46	4	19	0	423	
7	Tue	13	44	5	1	8	7	3	27	22	39	10		15	56	15	46	4	29	0	408	
8	Wed	14	29	9	1	8	7	7	33	22	32	45		16	54	15	46	4	38	0	393	
9	Thu	15	14	2	1	8	7	11	39	22	25	56		17	51	15	46	4	47	0	377	
10	Fri	15	57	5	1	8	7	15	45	22	18	44		18	48	15	46	4	56	0	361	
11	Sat	16	40	5	1	8	7	19	50	22	11	9		19	43	15	46	5	5	0	344	
12	Sun	17	23	9	1	8	7	23	54	22	3	12		20	38	15	46	5	13	0	326	
13	Mon	18	8	7	1	8	7	27	58	21	54	51		21	33	15	46	5	20	Subtract from Mean Time.	0	308
14	Tue	18	55	5	1	8	7	32	2	21	46	8		22	27	15	46	5	28		0	289
15	Wed	19	45	3	1	8	7	36	5	21	37	3		23	19	15	46	5	34		0	269
16	Thu	20	38	7	1	8	7	40	8	21	27	35		24	11	15	46	5	40		0	250
17	Fri	21	35	9	1	8	7	44	11	21	17	46		25	02	15	46	5	46		0	230
18	Sat	22	36	2	1	8	7	48	12	21	7	34		25	92	15	46	5	52		0	209
19	Sun	23	38	3	1	8	7	52	14	20	57	2		26	81	15	47	5	56		0	187
20	Mon	conjunc			1	8	7	56	14	20	46	8		27	69	15	47	6	0		0	164
21	Tue	0	40	3	1	8	8	0	15	20	34	53		28	56	15	47	6	4		0	140
22	Wed	1	40	4	1	8	8	4	14	20	23	17		29	42	15	47	6	7		0	117
23	Thu	2	37	7	1	7	8	8	13	20	11	21		30	27	15	47	6	10	0	094	
24	Fri	3	32	0	1	7	8	12	12	19	59	5		31	10	15	47	6	12	0	069	
25	Sat	4	23	9	1	7	8	16	10	19	46	28		31	93	15	47	6	13	0	043	
26	Sun	5	13	9	1	7	8	20	7	19	33	32		32	75	15	47	6	14	0	017	
27	Mon	6	2	9	1	7	8	24	4	19	20	16		33	56	15	47	6	14	0	008	
28	Tue	6	51	4	1	7	8	28	0	19	6	41		34	35	15	47	6	13	0	034	
29	Wed	7	40	0	1	7	8	31	55	18	52	48		35	13	15	47	6	12	0	059	
30	Thu	8	28	8	1	7	8	35	50	18	38	35		35	90	15	48	6	11	0	085	
31	Fri	9	17	7	1	7	8	39	44	18	24	5		36	66	15	48	6	8	0	111	
		10	6	4	1	7	8	43	38	18	9	16		37	41	15	48	6	5	0	136	

* Mean Time may be found by subtracting 0^h 19^m from the *Sideral*.

† The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's		Sideral Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S								Equation of Time.	Diff. for 1 hour			
		Southings	or Meridian Passage.		Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi-diam-eter.†									
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s
1	Sat	10	54.5	1	7	8	47	31	17	54	9N	38.14	15	48	6	2	0.162
2	Sun	11	41.6	1	6	8	51	23	17	38	45	38.85	15	48	5	57	0.187
3	Mon	12	27.6	1	6	8	55	15	17	23	4	39.57	15	48	5	53	0.213
4	Tue	13	12.2	1	6	8	59	6	17	7	6	40.28	15	48	5	47	0.238
5	Wed	13	55.9	1	6	9	2	57	16	50	51	40.96	15	48	5	41	0.262
6	Thu	14	38.9	1	6	9	6	47	16	34	20	41.64	15	49	5	35	0.286
7	Fri	15	21.9	1	6	9	10	36	16	17	32	42.30	15	49	5	28	0.311
8	Sat	16	5.5	1	6	9	14	25	16	0	29	42.95	15	49	5	20	0.334
9	Sun	16	50.5	1	6	9	18	13	15	43	11	43.59	15	49	5	11	0.357
10	Mon	17	37.7	1	6	9	22	1	15	25	37	44.22	15	49	5	3	0.380
11	Tue	18	27.9	1	6	9	25	48	15	7	48	44.83	15	49	4	53	0.403
12	Wed	19	21.5	1	6	9	29	35	14	49	44	45.43	15	50	4	43	0.425
13	Thu	20	18.6	1	6	9	33	21	14	31	27	46.02	15	50	4	33	0.447
14	Fri	21	18.5	1	5	9	37	6	14	12	55	46.60	15	50	4	22	0.469
15	Sat	22	19.8	1	5	9	40	51	13	54	10	47.16	15	50	4	10	0.490
16	Sun	23	20.9	1	5	9	44	36	13	35	11	47.71	15	50	3	58	0.511
17	Mon	conjunc		1	5	9	48	20	13	16	0	48.24	15	50	3	46	0.532
18	Tue	0	20.3	1	5	9	52	3	12	56	36	48.76	15	51	3	33	0.553
19	Wed	1	17.4	1	5	9	55	46	12	36	59	49.27	15	51	3	19	0.574
20	Thu	2	12.1	1	5	9	59	29	12	17	11	49.76	15	51	3	5	0.594
21	Fri	3	4.6	1	5	10	3	11	11	57	10	50.24	15	51	2	51	0.614
22	Sat	3	55.7	1	5	10	6	53	11	36	59	50.70	15	51	2	36	0.633
23	Sun	4	45.9	1	5	10	10	34	11	16	36	51.16	15	52	2	20	0.652
24	Mon	5	35.6	1	5	10	14	14	10	56	3	51.60	15	52	2	4	0.670
25	Tue	6	25.1	1	5	10	17	55	10	35	19	52.02	15	52	1	48	0.687
26	Wed	7	14.3	1	5	10	21	34	10	14	25	52.43	15	52	1	31	0.704
27	Thu	8	3.2	1	5	10	25	14	9	53	22	52.83	15	53	1	14	0.721
28	Fri	8	51.5	1	5	10	28	53	9	32	9	53.21	15	53	0	57	0.737
29	Sat	9	38.9	1	5	10	32	32	9	10	47	53.56	15	53	0	39	0.751
30	Sun	10	25.1	1	4	10	36	10	8	49	17	53.94	15	53	0	21	0.765
31	Mon	11	10.2	1	4	10	39	48	8	27	38	54.28	15	53	0	2	0.779

* Mean Time may be found by subtracting 0^h 18^m from the Sideral.

† The Semidiameter for Apparent Noon may be assumed the same as that for Mean Noon.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southings or Meridian Passage.		Sideral Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S						Equation of Time.	Diff. for 1 hour
					Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter.‡				
		h	m	m s	h m s	° ' "	" ' "	" ' "	m s	s		
1	Tue	11	54.3	1 4	10 43 26	8 5 51 N	54.62	15 54	0 17		0.791	
2	Wed	12	37.7	1 4	10 47 3	7 43 56	54.93	15 54	0 36		0.803	
3	Thu	13	20.9	1 4	10 50 40	7 21 53	55.24	15 54	0 55		0.814	
4	Fri	14	4.3	1 4	10 54 17	6 59 44	55.54	15 54	1 15		0.824	
5	Sat	14	48.8	1 4	10 57 54	6 37 27	55.82	15 55	1 35		0.833	
6	Sun	15	34.8	1 4	11 1 30	6 15 4	56.09	15 55	1 55		0.841	
7	Mon	16	23.1	1 4	11 5 7	5 52 34	56.34	15 55	2 15		0.848	
8	Tue	17	14.2	1 4	11 8 43	5 29 59	56.58	15 55	2 35		0.854	
9	Wed	18	8.3	1 4	11 12 19	5 7 18	56.81	15 56	2 56		0.860	
10	Thu	19	5.0	1 4	11 15 55	4 44 31	57.02	15 56	3 17		0.864	
11	Fri	20	3.7	1 4	11 19 30	4 21 40	57.23	15 56	3 38		0.868	
12	Sat	21	3.1	1 4	11 23 6	3 58 44	57.42	15 56	3 58		0.872	
13	Sun	22	2.0	1 4	11 26 42	3 35 43	57.59	15 57	4 19	Add to Mean Time.	0.874	
14	Mon	22	59.6	1 4	11 30 17	3 12 39	57.75	15 57	4 40		0.876	
15	Tue	23	55.4	1 4	11 33 53	2 49 31	57.89	15 57	5 1		0.877	
16	Wed	conjunc		1 4	11 37 28	2 26 19	58.02	15 57	5 23		0.878	
17	Thu	0	49.7	1 4	11 41 4	2 3 5	58.14	15 58	5 44		0.878	
18	Fri	1	42.6	1 4	11 44 39	1 39 48	58.24	15 58	6 5		0.877	
19	Sat	2	34.7	1 4	11 48 15	1 16 29	58.32	15 58	6 26		0.876	
20	Sun	3	26.2	1 4	11 51 50	0 53 8	58.39	15 58	6 47		0.873	
21	Mon	4	17.2	1 4	11 55 26	0 29 46	58.45	15 59	7 8	0.870		
22	Tue	5	7.8	1 4	11 59 1	0 6 22 N	58.49	15 59	7 28	0.866		
23	Wed	5	57.8	1 4	12 2 37	0 17 2 S	58.51	15 59	7 49	0.862		
24	Thu	6	46.9	1 4	12 6 13	0 40 27	58.52	16 0	8 10	0.857		
25	Fri	7	34.8	1 4	12 9 49	1 3 52	58.52	16 0	8 30	0.851		
26	Sat	8	21.5	1 4	12 13 25	1 27 17	58.51	16 0	8 51	0.843		
27	Sun	9	7.0	1 4	12 17 2	1 50 41	58.48	16 0	9 11	0.835		
28	Mon	9	51.4	1 4	12 20 38	2 14 5	58.43	16 1	9 31	0.826		
29	Tue	10	35.1	1 4	12 24 15	2 37 27	58.37	16 1	9 50	0.816		
30	Wed	11	18.5	1 4	12 27 52	3 0 47	58.30	16 1	10 10	0.805		

* Mean Time may be found by subtracting 0^s.18 from the *Sidereal*.

† The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's		Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S							Equation of Time.	Diff. for 1 hour			
		Southings	or Meridian Passage.		Apparent Right Ascension.	Apparent Declination.			Diff. for 1 hour	Semi- diam- eter.‡						
		h	m	m s	h	m	s	°	'	"	"	'	"	m	s	s
1	Thu	12	2·2	1 4	12	31	30	3	24	5 S	58·21	16	1	10	29	0·793
2	Fri	12	46·8	1 4	12	35	7	3	47	22	58·11	16	2	10	48	0·780
3	Sat	13	32·8	1 4	12	38	45	4	10	35	57·99	16	2	11	7	0·766
4	Sun	14	20·7	1 5	12	42	24	4	33	46	57·86	16	2	11	25	0·751
5	Mon	15	11·0	1 5	12	46	2	4	56	53	57·72	16	3	11	43	0·735
6	Tue	16	3·8	1 5	12	49	42	5	19	57	57·56	16	3	12	0	0·718
7	Wed	16	58·9	1 5	12	53	21	5	42	57	57·39	16	3	12	17	0·700
8	Thu	17	55·5	1 5	12	57	1	6	5	52	57·20	16	3	12	34	0·681
9	Fri	18	52·9	1 5	13	0	41	6	28	43	57·00	16	4	12	50	0·662
10	Sat	19	49·9	1 5	13	4	22	6	51	28	56·78	16	4	13	5	0·642
11	Sun	20	46·1	1 5	13	8	4	7	14	9	56·55	16	4	13	21	0·621
12	Mon	21	41·0	1 5	13	11	46	7	36	43	56·30	16	4	13	35	0·599
13	Tue	22	34·7	1 5	13	15	28	7	59	11	56·03	16	5	13	49	0·577
14	Wed	23	27·7	1 5	13	19	11	8	21	33	55·75	16	5	14	3	0·554
15	Thu	conjunc		1 5	13	22	55	8	43	47	55·45	16	5	14	16	0·530
16	Fri	0	20·2	1 5	13	26	39	9	5	54	55·13	16	6	14	28	0·506
17	Sat	1	12·5	1 5	13	30	23	9	27	54	54·80	16	6	14	40	0·481
18	Sun	2	4·8	1 6	13	34	9	9	49	45	54·45	16	6	14	51	0·456
19	Mon	2	56·9	1 6	13	37	55	10	11	27	54·08	16	6	15	2	0·430
20	Tue	3	48·5	1 6	13	41	41	10	33	1	53·70	16	7	15	12	0·404
21	Wed	4	39·1	1 6	13	45	28	10	54	25	53·30	16	7	15	21	0·377
22	Thu	5	28·4	1 6	13	49	16	11	15	39	52·88	16	7	15	30	0·350
23	Fri	6	16·1	1 6	13	53	5	11	36	43	52·44	16	7	15	38	0·322
24	Sat	7	2·1	1 6	13	56	54	11	57	36	51·99	16	8	15	46	0·293
25	Sun	7	46·9	1 6	14	0	44	12	18	18	51·52	16	8	15	52	0·264
26	Mon	8	30·7	1 6	14	4	34	12	38	49	51·03	16	8	15	58	0·234
27	Tue	9	14·0	1 6	14	8	26	12	59	8	50·53	16	9	16	4	0·204
28	Wed	9	57·6	1 7	14	12	18	13	19	14	50·01	16	9	16	8	0·173
29	Thu	10	42·0	1 7	14	16	11	13	39	8	49·48	16	9	16	12	0·141
30	Fri	11	27·9	1 7	14	20	4	13	58	49	48·93	16	9	16	15	0·109
31	Sat	12	15·8	1 7	14	23	58	14	18	16	48·36	16	10	16	17	0·076

* Mean Time may be found by subtracting 0s·18 from the *Sidereal*.

† The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southings or Meridian Passage		Sider ^l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S							Equation of Time.	Diff. for 1 hour				
					Apparent Right Ascension.		Apparent Declination.		Diff. for 1 hour	Semi- diam- eter.‡							
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s
1	Sun	13	6.3	1	7	14	27	54	14	37	30 S	47.78	16	10	16	18	0.042
2	Mon	13	59.3	1	7	14	31	50	14	56	29	47.18	16	10	16	19	0.009
3	Tue	14	54.6	1	7	14	35	46	15	15	14	46.56	16	10	16	19	0.026
4	Wed	15	51.3	1	7	14	39	44	15	33	44	45.93	16	11	16	18	0.061
5	Thu	16	48.5	1	7	14	43	42	15	51	59	45.28	16	11	16	16	0.096
6	Fri	17	44.9	1	8	14	47	42	16	9	57	44.62	16	11	16	13	0.132
7	Sat	18	40.1	1	8	14	51	42	16	27	40	43.94	16	11	16	9	0.168
8	Sun	19	33.7	1	8	14	55	43	16	45	6	43.24	16	12	16	5	0.204
9	Mon	20	26.0	1	8	14	59	45	17	2	15	42.52	16	12	16	0	0.240
10	Tue	21	17.5	1	8	15	3	48	17	19	7	41.79	16	12	15	53	0.276
11	Wed	22	8.7	1	8	15	7	51	17	35	40	41.04	16	12	15	46	0.312
12	Thu	23	0.0	1	8	15	11	56	17	51	56	40.27	16	12	15	39	0.347
13	Fri	23	51.9	1	8	15	16	1	18	7	53	39.49	16	13	15	30	0.383
14	Sat	conjunc		1	9	15	20	7	18	23	31	38.69	16	13	15	20	0.419
15	Sun	0	44.2	1	9	15	24	14	18	38	50	37.88	16	13	15	10	0.454
16	Mon	1	36.6	1	9	15	28	22	18	53	48	37.04	16	13	14	58	0.489
17	Tue	2	28.6	1	9	15	32	31	19	8	27	36.19	16	13	14	46	0.523
18	Wed	3	19.3	1	9	15	36	40	19	22	45	35.32	16	14	14	33	0.557
19	Thu	4	8.5	1	9	15	40	51	19	36	42	34.44	16	14	14	19	0.590
20	Fri	4	55.7	1	9	15	45	2	19	50	17	33.54	16	14	14	5	0.624
21	Sat	5	41.2	1	9	15	49	14	20	3	31	32.63	16	14	13	49	0.656
22	Sun	6	25.2	1	9	15	53	26	20	16	22	31.70	16	14	13	33	0.688
23	Mon	7	8.4	1	10	15	57	40	20	28	52	30.75	16	15	13	16	0.720
24	Tue	7	51.3	1	10	16	1	54	20	40	58	29.79	16	15	12	59	0.751
25	Wed	8	34.8	1	10	16	6	9	20	52	41	28.82	16	15	12	40	0.781
26	Thu	9	19.7	1	10	16	10	25	21	4	0	27.83	16	15	12	21	0.811
27	Fri	10	6.8	1	10	16	14	41	21	14	56	26.83	16	15	12	1	0.841
28	Sat	10	56.6	1	10	16	18	58	21	25	28	25.82	16	15	11	41	0.870
29	Sun	11	49.5	1	10	16	23	16	21	35	35	24.80	16	16	11	20	0.898
30	Mon	12	45.3	1	10	16	27	34	21	45	18	23.76	16	16	10	58	0.926

Add to Mean Time.

Mean Time may be found by subtracting 0s.19 from the *Sidercal*.
 † The Semidiameter for *Apparent Noon* may be assumed the same
 as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.		Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S								Equation of Time.	Diff. for 1 hour		
					Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter. ‡								
h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s	
1	Tue	13	43.3	1	10	16	31	53	21	54	35 S	22-72	16	16	10 35	0-953
2	Wed	14	42.1	1	10	16	36	13	22	3	27	21-66	16	16	10 12	0-979
3	Thu	15	40.3	1	10	16	40	34	22	11	54	20-59	16	16	9 48	1-005
4	Fri	16	36.8	1	11	16	44	55	22	19	55	19-51	16	16	9 24	1-020
5	Sat	17	31.1	1	11	16	49	16	22	27	30	18-42	16	16	8 59	1-052
6	Sun	18	23.3	1	11	16	53	38	22	34	39	17-33	16	17	8 33	1-075
7	Mon	19	13.9	1	11	16	58	1	22	41	21	16-22	16	17	8 7	1-096
8	Tue	20	3 8	1	11	17	2	24	22	47	37	15-10	16	17	7 41	1-116
9	Wed	20	53.5	1	11	17	6	47	22	53	26	13-97	16	17	7 14	1-136
10	Thu	21	43 8	1	11	17	11	11	22	58	47	12-84	16	17	6 46	1-154
11	Fri	22	34.8	1	11	17	15	36	23	3	41	11-70	16	17	6 18	1-170
12	Sat	23	26.5	1	11	17	20	1	23	8	8	10-55	16	17	5 50	1-185
13	Sun	conjunc		1	11	17	24	26	23	12	8	9-40	16	17	5 21	1-198
14	Mon	0	18 4	1	11	17	28	51	23	15	39	8-24	16	17	4 53	1-210
15	Tue	1	9 8	1	11	17	33	17	23	18	43	7-08	16	17	4 23	1-220
16	Wed	2	0 1	1	11	17	37	43	23	21	19	5-91	16	18	3 54	1-229
17	Thu	2	48.6	1	11	17	42	9	23	23	27	4-74	16	18	3 24	1-236
18	Fri	3	35.1	1	11	17	46	35	23	25	6	3-57	16	18	2 55	1-242
19	Sat	4	19 9	1	11	17	51	2	23	26	18	2-39	16	18	2 25	1-246
20	Sun	5	3.2	1	11	17	55	28	23	27	1	1-21	16	18	1 55	1-248
21	Mon	5	45 7	1	11	17	59	55	23	27	16	0-03	16	18	1 25	1-249
22	Tue	6	28.2	1	11	18	4	21	23	27	2	1-15	16	18	0 55	1-249
23	Wed	7	11.5	1	11	18	8	48	23	26	20	2-33	16	18	0 25	1-247
24	Thu	7	56.5	1	11	18	13	14	23	25	10	3-51	16	18	0 5	1-244
25	Fri	8	44.1	1	11	18	17	41	23	23	32	4-69	16	18	0 35	1-240
26	Sat	9	35.0	1	11	18	22	7	23	21	25	5-87	16	18	1 4	1-234
27	Sun	10	29.6	1	11	18	26	33	23	18	50	7-04	16	18	1 34	1-227
28	Mon	11	27.4	1	11	18	30	59	23	15	48	8-21	16	18	2 3	1-218
29	Tue	12	27.5	1	11	18	35	25	23	12	17	9-3	16	18	2 32	1-209
30	Wed	13	28.2	1	11	18	39	50	23	8	18	10-53	16	18	3 1	1-198
31	Thu	14	27 6	1	11	18	44	15	23	3	52	11-68	16	18	3 30	1-187

* Mean Time may be found by subtracting 0^m.19 from the *Sidereal*.

‡ The Semidiameter for *Apparent* Noon may be assumed the same as that for *Mean* Noon.

BRISTOL CHANNEL LIGHTS AND TOWER FOR SHIPS' GUIDANCE.

NAMES OF PLACES.	LIGHTS.	HOW SHOWN.	DISTANCE SEEN.	ELEVATION OF LIGHTS, WITH REMARKS.
TREVOSE HEAD	Two..	{ Upper, fixed .. Lower, " ..	.....	Upper, 204 feet, seen from South to E. $\frac{1}{2}$ S.
PADSTOW	Tower		8 leag. clear weath	Lower, 129 feet, seen from N.E. $\frac{1}{4}$ E. to S.W. $\frac{1}{4}$ W.
LUNDY ISLAND	Two..	{ Upper, revolves .. Lower, fixed ..	30 miles	Elevated 264 feet above the level of the sea.
BIDEFORD	Two..	{ Upper, fixed .. Lower, " ..	28 miles	Upper, 528 ft. revolves in 2 m. and seen all round.
ILFRACOMBE, <i>Harb.</i>	One..	{ Upper, fixed .. Lower, " ..	15 miles	Lower, 86 ft. } being 933 ft. asunder.
MINEHEAD, <i>Harbour</i>	One..	Fixed, <i>red</i> .....	.....	Shown from Michaelmas to Lady-day only.
BURNHAM	Two..	{ Fixed .....	.....	Shown during Tide Time.
		{ Upper, flashes ..	.....	Elevated 91 $\frac{1}{2}$ ft.; flashes in 3 $\frac{1}{2}$ m., and seen from N.b.W. to W.b.N.
		{ Lower, fixed ..	.....	Elevated 23 ft., seen from N.W.b.W. $\frac{1}{4}$ W. to W.b.N.
FLATHOLM	One..	Fixed	16 miles	Elevated 156 ft. above high water.
FLOAT. LIGHT VESS.	One..	Revolving .....	.....	Off the English Grounds.
FLOAT, LIGHT VESS.	One..	{ Upper, revolves .. Lower, fixed, <i>red</i>	.....	Near the W. end of the One Fathom Bank.
AVON, <i>River</i>	One..	Fixed, <i>red</i>	12 miles	Elevated 73 ft.; visible 12 miles.
NASH POINT	Two..	{ Upper, fixed .. Lower, " ..	.....	Elevated 167 feet, } being 1000 feet asunder.
		{ Fixed	15 miles	Elevated 114 feet, }
MUMBLES	One..	Fixed	9 miles clear weath	" 28 feet, } above high-water level.
SWANSEA, <i>Harbour</i> ..	One..	Fixed, <i>red</i> .....	.....	Elevated 38 feet; flashes in 20 seconds.
SCARWEATHER SAND	One..	Revolving, <i>red</i> ..	.....	Seen from sun-set to sun-rise, <i>sides red</i> , with,
LIGHT VESSEL	One..	Revolving .....	.....	" "Helwick" painted on them.
PORTRCAWL <i>Harbour</i>	One..	Fixed .....	.....
CALDY ISLAND	One..	Fixed	19 miles	Upper 192 feet, } above the level of the sea.
ST. ANN'S POINT ..	Two..	{ Upper, fixed .. Lower, " ..	19 miles	Lower 160 feet, }
		{ Fixed, <i>white</i> ..	17 miles	Elevated 70 feet above high-water level.
SMALLS	One..	Fixed	16 miles	

TIDE TABLES.

EXPLANATION.

The Tides in this work are calculated for Greenwich Mean Time, and the Height for that Tide nearest mid-day at the following places:—

BARNSTAPLE.—*The Bar.*

BRIDGEWATER.—*The Bridge. The Time of high-water at Bridgewater Bar is about 40 minutes earlier. The depth of water at Cumbwitch Pill is 7 to 8 feet more than in the Tables.*

BRISTOL.—*Cumberland Gates. The height at Bathurst Gates is 9 feet 2 inches less than in the Tables.*

BRITON FERRY.—*Neath Bar. At Vale of Neath Railway Wharf, the depth is 8 inches less than in the Tables; at Giants Grave, 2 feet 6 inches less; Crown Works, and Neath Abbey 4 feet 6 inches less; Neath, 5 feet 6 inches less.*

CARDIFF.—*East Dock Sill. At the West Dock, the depth is 3 feet less than in the Tables; at the Glamorganshire Canal, 13 feet less.*

GLOUCESTER.—*Entrance to the Canal at Sharpness Point.*

ILFRACOMBE.—*Pier Head.*

LLANELLY.—*Dock Gates. At Burry Bar the depth of water is 8 feet more than in the Tables.*

NEWPORT.—*Dock Gates, which are about 40 feet above the bed of the river.*

MILFORD HAVEN.—*The heights are the rise above low-water at spring tides. The time at St. Ann's Lighthouse, is about 25 minutes earlier.*

SWANSEA.—*Entrance Channel. The depth of water at New Cut Bridge, is about 4 feet, and at Hafod Works 7 feet 6 inches less than in the Tables.*

PHASES OF THE MOON.

First Quarter. 3rd, 4h. 2m. a.m. | Last Quarter. 16th, 5h. 3m. p.m.
 Full Moon .. 9th, 10h. 52m. p.m. | New Moon .. 24th, 7h. 18m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Wednesday	9 23	9 41	24	1	11 6	11 22	11 2	10 46	11 2	23	4	
2	Thursday	10 0	10 19	23	6	11 40	11 59	10 5	11 20	11 39	22	3	
3	Friday ..	10 42	11 9	22	11	..	0 26	9 8	..	0 6	21	3	
4	Saturday..	11 39	..	22	8	0 56	1 28	9 4	0 36	1 8	20	9	
5	Sunday ..	0 11	0 50	23	1	2 3	2 40	9 11	1 43	2 20	21	7	
6	Monday..	1 31	2 8	24	0	3 17	3 54	11 0	2 57	3 34	23	3	
7	Tuesday..	2 40	3 14	25	4	4 28	5 5	12 8	4 8	4 45	25	8	
8	Wednesday	3 47	4 16	26	9	5 40	6 9	14 6	5 20	5 49	28	2	
9	Thursday	4 44	5 15	27	10	6 38	7 9	15 10	6 18	6 49	30	2	
10	Friday ..	5 42	6 7	28	3	7 37	8 4	16 4	7 17	7 44	30	11	
11	Saturday..	6 33	6 57	28	9	8 29	8 53	17 0	8 9	8 33	31	10	
12	Sunday ..	7 21	7 45	28	8	9 16	9 38	16 10	8 56	9 18	31	8	
13	Monday..	8 8	8 31	28	2	9 59	10 20	16 3	9 39	10 0	30	10	
14	Tuesday..	8 54	9 15	27	2	10 41	10 59	15 0	10 21	10 39	29	0	
15	Wednesday	9 36	9 57	25	11	11 18	11 37	13 5	10 58	11 17	26	8	
16	Thursday	10 18	10 39	24	7	11 58	..	11 9	11 38	..	24	2	
17	Friday ..	11 3	11 31	23	2	0 22	0 49	10 0	0 2	0 29	21	8	
18	Saturday..	..	0 5	22	3	1 20	1 57	8 10	1 0	1 37	20	0	
19	Sunday ..	0 43	1 24	22	1	2 33	3 11	8 8	2 13	2 51	19	9	
20	Monday..	2 4	2 39	22	7	3 49	4 26	9 3	3 29	4 6	20	7	
21	Tuesday..	3 11	3 41	23	6	5 1	5 34	10 5	4 41	5 14	22	3	
22	Wednesday	4 7	4 32	24	4	6 0	6 26	11 5	5 40	6 6	23	9	
23	Thursday	4 56	5 18	25	1	6 50	7 12	12 5	6 30	6 52	25	2	
24	Friday ..	5 36	5 54	25	5	7 31	7 50	12 10	7 11	7 30	25	9	
25	Saturday..	6 12	6 29	25	11	8 9	8 25	13 5	7 49	8 5	26	8	
26	Sunday ..	6 45	7 0	26	3	8 41	8 56	13 10	8 21	8 36	27	4	
27	Monday..	7 17	7 32	26	4	9 13	9 27	13 11	8 53	9 7	27	6	
28	Tuesday..	7 48	8 4	26	2	9 41	9 56	13 9	9 21	9 36	27	2	
29	Wednesday	8 22	8 40	25	10	10 13	10 28	13 4	9 53	10 8	26	6	
30	Thursday	8 56	9 14	25	4	10 43	10 59	12 8	10 23	10 39	25	8	
31	Friday ..	9 32	9 53	24	8	11 14	11 33	11 10	10 54	11 13	24	4	

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m — Bridgewater, *sub.* 12m. — Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 3rd, 4h. 2m. a.m. | Last Quarter. 16th, 5h. 3m. p.m.
 Full Moon .. 9th, 10h. 52m. p.m. | New Moon .. 24th, 7h. 18m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.						Cardiff.						Gloucester.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	9	58	10	16	17	8	10	38	10	54	24	11	11	31	11	47	21	7
2	Thursday	10	35	10	54	16	11	11	12	11	31	24	0	..	0	5	20	6	
3	Friday ..	11	17	11	44	16	2	11	58	..	23	2		0	24	0	51	19	5
4	Saturday..	..	0	14	15	10		0	28	1	0	22	9	1	21	1	53	18	11
5	Sunday ..	0	46	1	25	16	5	1	45	2	12	23	5	2	28	3	5	19	9
6	Monday..	2	6	2	43	17	6	2	49	3	26	24	10	3	42	4	19	21	6
7	Tuesday..	3	15	3	49	19	2	4	0	4	37	26	11	4	53	5	30	24	1
8	Wednesday	4	22	4	51	21	0	5	12	5	41	29	1	6	5	6	34	26	11
9	Thursday	5	19	5	50	22	4	6	10	6	41	30	10	7	3	7	34	29	1
10	Friday ..	6	17	6	42	22	10	7	9	7	36	31	5	8	2	8	29	29	9
11	Saturday..	7	8	7	32	23	6	8	1	8	25	32	2	8	54	9	18	30	9
12	Sunday ..	7	56	8	20	23	4	8	48	9	10	32	0	9	41	10	3	30	7
13	Monday..	8	43	9	6	22	9	9	32	9	52	31	4	10	24	10	45	29	8
14	Tuesday..	9	29	9	50	21	6	10	13	10	31	29	9	11	6	11	24	27	9
15	Wednesday	10	11	10	32	19	11	10	50	11	9	27	10	11	44	..	25	3	
16	Thursday	10	53	11	14	18	3	11	30	11	54	25	8	0	2	0	23	22	7
17	Friday ..	11	38	..	16	6		..	0	21	23	6		0	47	1	14	19	11
18	Saturday..	0	6	0	40	15	4	0	52	1	29	22	1	1	45	2	22	18	2
19	Sunday ..	1	18	1	59	15	2	2	5	2	43	21	10	2	58	3	36	17	9
20	Monday..	2	39	3	14	15	9	3	21	3	58	22	7	4	14	4	51	18	9
21	Tuesday..	3	46	4	16	16	11	4	33	5	6	24	0	5	26	5	59	20	6
22	Wednesday	4	42	5	7	17	11	5	32	5	58	25	3	6	25	6	51	22	1
23	Thursday	5	31	5	53	18	11	6	22	6	44	26	6	7	15	7	37	23	7
24	Friday ..	6	11	6	29	19	4	7	3	7	22	27	0	7	56	8	15	24	3
25	Saturday..	6	47	7	4	19	11	7	41	7	57	27	10	8	34	8	50	25	3
26	Sunday ..	7	20	7	35	20	4	8	13	8	28	28	4	9	6	9	21	25	11
27	Monday..	7	52	8	7	20	5	8	45	8	59	28	6	9	38	9	52	26	1
28	Tuesday..	8	23	8	39	20	3	9	13	9	28	28	3	10	6	10	21	25	9
29	Wednesday	8	57	9	15	19	10	9	45	10	0	27	8	10	38	10	53	25	1
30	Thursday	9	31	9	49	19	2	10	15	10	31	26	11	11	8	11	24	24	1
31	Friday ..	10	7	10	28	18	4	10	46	11	5	25	10	11	39	11	58	22	9

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 3rd, 4h. 2m. a.m. | Last Quarter. 16th, 5h. 3m. p.m.
 Full Moon .. 9th, 10h. 52m. p.m. | New Moon .. 24th, 7h. 18m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.					Llanelly.					Milford Haven.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	9	33	9	51	17	7	10	8	10	26	18	1	10	8	10	26	17	7
2	Thursday	10	10	10	30	16	11	10	45	11	4	17	5	10	45	11	4	17	0
3	Friday ..	10	53	11	19	16	3	11	27	11	54	16	9	11	27	11	54	16	5
4	Saturday..	11	49	..	..	16	0	..	0	24	16	6	..	..	0	24	16	2	2
5	Sunday ..	0	21	1	0	16	6	0	56	1	35	17	0	0	56	1	35	16	7
6	Monday..	1	41	2	18	17	6	2	16	2	53	18	0	2	16	2	53	17	6
7	Tuesday..	2	50	3	24	18	11	3	25	3	59	19	5	3	25	3	59	18	10
8	Wednesday	3	57	4	26	20	6	4	32	5	12	0	4	32	5	1	20	3	3
9	Thursday	4	54	5	25	21	8	5	29	6	0	22	2	5	29	6	0	21	4
10	Friday ..	5	52	6	17	22	1	6	27	6	52	27	7	6	27	6	52	21	9
11	Saturday..	6	43	7	7	22	8	7	18	7	42	23	2	7	18	7	42	22	3
12	Sunday ..	7	31	7	55	22	7	8	6	8	30	23	1	8	6	8	30	22	2
13	Monday..	8	18	8	41	22	0	8	53	9	16	22	6	8	53	9	16	21	8
14	Tuesday..	9	4	9	25	20	11	9	39	10	0	21	5	9	39	10	0	20	8
15	Wednesday	9	46	10	7	19	7	10	21	10	42	20	1	10	21	10	42	19	5
16	Thursday	10	28	10	50	18	1	11	3	11	24	18	7	11	3	11	24	18	1
17	Friday ..	11	13	11	41	16	7	11	48	..	17	1	11	48	..	..	16	8	8
18	Saturday..	..	..	0	16	15	7	0	16	0	50	16	1	0	16	0	50	15	9
19	Sunday ..	0	53	1	34	15	5	1	28	2	9	15	11	1	28	2	9	15	7
20	Monday..	2	14	2	49	15	11	2	49	3	24	16	5	2	49	3	24	16	1
21	Tuesday..	3	21	3	51	16	11	3	56	4	26	17	5	3	56	4	26	17	0
22	Wednesday	4	17	4	42	17	10	4	52	5	17	18	4	4	52	5	17	17	10
23	Thursday	5	6	5	28	18	8	5	41	6	3	19	2	5	41	6	3	18	7
24	Friday ..	5	46	6	4	19	0	6	21	6	39	19	6	6	21	6	39	18	11
25	Saturday..	6	22	6	39	19	7	6	57	7	14	20	1	6	57	7	14	19	5
26	Sunday ..	6	55	7	10	19	11	7	30	7	45	20	5	7	30	7	45	19	9
27	Monday..	7	27	7	42	20	0	8	2	8	17	20	6	8	2	8	17	19	10
28	Tuesday..	7	58	8	14	19	10	8	33	8	49	20	4	8	33	8	49	19	8
29	Wednesday	8	32	8	50	19	6	9	7	9	25	20	0	9	7	9	25	19	4
30	Thursday	9	6	9	24	18	11	9	41	9	59	19	5	9	41	9	59	18	10
31	Friday ..	9	42	10	3	18	2	10	17	10	38	18	8	10	17	10	38	18	2

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter 3rd, 4h. 2m. a.m. | Last Quarter. 16th, 5h. 3m. p.m.
 Full Moon .. 9th, 10h. 52m. p.m. | New Moon .. 24th, 7h. 18m. p.m.

M. D.	W. D.	Newport.				Swansea.				Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.
1	Wd	10	46	11	23	8		9	58	10	16	18	8	2	50	3	10
2	Th	11	20	11	39	22	8	10	35	10	54	17	11	3	31	3	52
3	Fri	..	0	6	21	8		11	17	11	44	17	2	4	15	4	46
4	Sat	0	36	1	8	21	2	..	0	14	16	10		5	20	5	56
5	Sun	1	43	2	20	22	0	0	46	1	25	17	5	6	35	7	13
6	Mo	2	57	3	34	23	6	2	6	2	43	18	6	7	49	8	21
7	Tu	4	8	4	45	26	0	3	15	3	49	20	2	8	49	9	18
8	Wd	5	20	5	49	28	5	4	22	4	51	22	0	9	45	10	9
9	Th	6	18	6	49	30	6	5	19	5	50	23	4	10	33	11	1
10	Fri	7	17	7	44	31	2	6	17	6	42	23	10	11	27	11	53
11	Sat	8	9	8	33	32	0	7	8	7	32	24	6	..	0	19	
12	Sun	8	56	9	18	31	10	7	56	8	20	24	4	0	43	1	8
13	Mo	9	39	10	03	1	1	8	43	9	6	23	9	1	31	1	53
14	Tu	10	21	10	39	29	3	9	29	9	50	22	6	2	16	2	40
15	Wd	10	58	11	17	27	1	10	11	10	32	20	11	3	2	3	25
16	Th	11	38	..	24	6		10	53	11	14	19	3	3	48	4	13
17	Fri	0	2	0	29	22	1	11	38	..	17	6		4	41	5	12
18	Sat	1	0	1	37	20	5	0	6	0	40	16	4	5	47	6	28
19	Sun	2	13	2	51	20	1	1	18	1	59	16	2	7	5	7	43
20	Mo	3	29	4	6	21	0	2	39	3	14	16	9	8	17	8	48
21	Tu	4	41	5	14	22	8	3	46	4	16	17	11	9	15	9	40
22	Wd	5	40	6	6	24	0	4	42	5	7	18	11	10	2	10	23
23	Th	6	30	6	52	25	6	5	31	5	53	19	11	10	43	11	4
24	Fri	7	11	7	30	26	1	6	11	6	29	20	4	11	21	11	40
25	Sat	7	49	8	5	27	1	6	47	7	4	20	11	11	58	..	
26	Sun	8	21	8	36	27	8	7	20	7	35	21	4	0	15	0	31
27	Mo	8	53	9	7	27	10	7	52	8	7	21	5	0	46	1	4
28	Tu	9	21	9	36	27	6	8	23	8	39	21	3	1	19	1	34
29	Wd	9	53	10	8	26	11	8	57	9	15	20	10	1	50	2	7
30	Th	10	23	10	39	26	0	9	31	9	49	20	2	2	25	2	42
31	Fri	10	54	11	13	24	9	10	7	10	28	19	4	3	1	3	20

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 1st, 6h. 15m. p.m. | Last Quarter.. 15th, 9h. 16m. a.m.
 Full Moon .. 8th, 9h. 35m. a.m. | New Moon .. 23rd, 2h. 20m. p.m.

M. D.	WEEK DAYS.	Barnstaple.						Bridgewater.						Bristol.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Saturday.	10	13	10	33	23	10	11	53	..	..	10	10	11	33	11	55	22	10
2	Sunday ..	10	57	11	26	22	11	0	15	0	42	9	8	..	0	22	21	3	
3	Monday..	..	..	0	3	22	7	1	15	1	54	9	3	0	55	1	34	20	7
4	Tuesday...	0	44	1	29	23	2	2	34	3	15	10	0	2	14	2	55	21	8
5	Wednesdy	2	14	2	54	24	6	4	0	4	42	11	8	3	40	4	22	24	0
6	Thursday.	3	30	4	2	26	2	5	22	5	56	13	9	5	2	5	36	27	2
7	Friday ..	4	32	5	3	27	8	6	26	6	57	15	7	6	6	6	37	29	11
8	Saturday..	5	31	5	55	28	4	7	25	7	51	16	5	7	5	7	31	31	0
9	Sunday ..	6	19	6	42	29	0	8	15	8	38	17	3	7	55	8	18	32	4
10	Monday..	7	5	7	27	29	3	9	1	9	22	17	7	8	41	9	2	32	9
11	Tuesday..	7	49	8	11	28	9	9	42	10	3	17	0	9	22	9	43	31	10
12	Wednesdy	8	31	8	50	27	10	10	20	10	37	15	10	10	0	10	17	30	3
13	Thursday.	9	9	9	27	26	6	10	55	11	10	14	2	10	35	10	50	27	10
14	Friday ..	9	46	10	7	25	0	11	27	11	47	12	3	11	7	11	27	25	0
15	Saturday..	10	27	10	49	23	5	..	0	7	10	4	11	47	..	..	22	2	
16	Sunday ..	11	16	11	49	22	0	0	34	1	4	8	6	0	14	0	44	19	6
17	Monday..	..	..	0	29	21	3	1	38	2	19	7	6	1	18	1	59	18	2
18	Tuesday..	1	13	1	57	21	6	3	1	3	42	7	10	2	41	3	22	18	7
19	Wednesdy	2	39	3	15	22	5	4	26	5	6	9	1	4	6	4	46	20	4
20	Thursday.	3	43	4	7	23	7	5	36	6	0	10	6	5	16	5	40	22	5
21	Friday ..	4	30	4	55	24	9	6	24	6	49	12	0	6	4	6	29	24	6
22	Saturday..	5	16	5	33	25	2	7	10	7	27	12	6	6	50	7	7	25	4
23	Sunday ..	5	50	6	6	26	1	7	46	8	3	13	8	7	26	7	43	27	0
24	Monday..	6	23	6	39	26	9	8	19	8	35	14	6	7	59	8	15	28	2
25	Tuesday..	6	55	7	9	27	1	8	51	9	5	14	11	8	31	8	45	28	10
26	Wednesdy	7	25	7	41	27	2	9	20	9	36	15	0	9	0	9	16	29	0
27	Thursday.	7	57	8	15	26	11	9	50	10	6	14	8	9	30	9	46	28	6
28	Friday ..	8	33	8	51	26	4	10	22	10	38	13	11	10	2	10	18	27	6
29	Saturday..	9	8	9	25	25	6	10	53	11	8	12	11	10	33	10	48	25	11

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 1st, 6h. 15m. p.m. | Last Quarter. 15th, 9h. 16m. a.m.
 Full Moon .. 8th, 9h. 35m. a.m. | New Moon .. 23rd, 2h. 20m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Saturday	10	48	11	8	17	4	11	25	11	47	24	6
2	Sunday	11	32	..	..	16	2	..	0	14	23	2	0
3	Monday	0	1	0	38	15	9	0	47	1	26	22	7
4	Tuesday	1	19	2	4	16	6	2	6	2	47	23	6
5	Wednesday	2	49	3	29	18	2	3	32	4	14	25	6
6	Thursday	4	5	4	37	20	3	4	54	5	28	28	3
7	Friday	5	7	5	38	22	1	5	58	6	29	30	7
8	Saturday	6	6	6	30	22	11	6	57	7	23	31	6
9	Sunday	6	54	7	17	23	9	7	47	8	10	32	7
10	Monday	7	40	8	2	24	1	8	33	8	54	33	0
11	Tuesday	8	24	8	46	23	6	9	14	9	35	32	2
12	Wednesday	9	6	9	25	22	4	9	52	10	9	30	10
13	Thursday	9	44	10	2	20	8	10	27	10	42	28	9
14	Friday	10	21	10	42	18	9	10	59	11	19	26	5
15	Saturday	11	2	11	24	16	10	11	39	..	23	11	0
16	Sunday	11	51	..	..	15	0	0	6	0	36	21	8
17	Monday	0	24	1	4	14	0	1	11	1	51	20	6
18	Tuesday	1	48	2	32	14	4	2	33	3	14	20	10
19	Wednesday	3	14	3	50	15	7	3	58	4	38	22	4
20	Thursday	4	18	4	42	17	0	5	8	5	32	24	2
21	Friday	5	5	5	30	18	6	5	56	6	21	26	0
22	Saturday	5	51	6	8	19	0	6	42	6	59	26	7
23	Sunday	6	25	6	41	20	2	7	18	7	35	28	1
24	Monday	6	58	7	14	21	0	7	51	8	7	29	1
25	Tuesday	7	30	7	44	21	5	8	23	8	37	29	8
26	Wednesday	8	0	8	16	21	6	8	52	9	8	29	9
27	Thursday	8	32	8	50	21	2	9	22	9	38	29	5
28	Friday	9	8	9	26	20	5	9	54	10	10	28	6
29	Saturday	9	43	10	0	19	5	10	25	10	40	27	2

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10 m.
 For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 1st, 6h. 15m. p.m. | Last Quarter. 15th, 9h. 16m. a.m.
 Full Moon .. 8th, 9h. 35m. a.m. | New Moon .. 23rd, 2h. 20m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.									
		Morn.		Even.		Height		Morn.		Even.		Height							
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.						
1	Saturday..	10	23	10	43	17	4	10	58	11	18	17	10	10	58	11	18	17	4
2	Sunday ..	11	7	11	37	16	3	11	42	..	16	9	11	42	..	16	5	..	..
3	Monday..	..	..	0	13	15	11	0	11	0	48	16	5	0	11	0	48	16	1
4	Tuesday ..	0	54	1	39	16	7	1	29	2	14	17	1	1	29	2	14	16	8
5	Wednesday	2	24	3	4	18	0	2	59	3	39	18	6	2	59	3	39	18	0
6	Thursday.	8	40	4	12	19	10	4	15	4	47	20	4	4	15	4	47	19	8
7	Friday ..	4	42	5	13	21	6	5	17	5	48	22	0	5	17	5	48	21	2
8	Saturday .	5	41	6	5	22	2	6	16	6	40	22	8	6	16	6	40	21	10
9	Sunday ..	6	29	6	52	22	11	7	4	7	27	23	5	7	4	7	27	22	6
10	Monday..	7	15	7	37	23	2	7	50	8	12	23	8	7	50	8	12	22	9
11	Tuesday..	7	59	8	21	22	8	8	34	8	56	23	2	8	34	8	56	22	3
12	Wednesday	8	41	9	0	21	8	9	16	9	35	22	2	9	16	9	35	21	4
13	Thursday.	9	20	9	37	20	2	9	54	10	12	20	8	9	54	10	12	20	0
14	Friday ..	9	57	10	17	18	7	10	31	10	52	19	1	10	31	10	52	18	6
15	Saturday..	10	37	11	0	16	10	11	12	11	34	17	4	11	12	11	34	16	11
16	Sunday ..	11	26	11	59	15	3	..	..	0	1	15	9	..	..	0	1	15	6
17	Monday..	..	..	0	39	14	5	0	34	1	14	14	11	0	34	1	14	14	9
18	Tuesday..	1	23	2	7	14	8	1	58	2	42	15	2	1	58	2	42	15	0
19	Wednesday	2	49	3	25	15	9	3	24	4	0	16	3	3	24	4	0	15	11
20	Thursday.	3	53	4	17	17	0	4	28	4	52	17	6	4	28	4	52	17	1
21	Friday ..	4	40	5	5	18	4	5	15	5	40	18	10	5	15	5	40	18	3
22	Saturday..	5	26	5	43	18	9	6	1	6	18	19	3	6	1	6	18	18	8
23	Sunday ..	6	0	6	16	19	9	6	35	6	51	20	3	6	35	6	51	19	7
24	Monday..	6	33	6	49	20	6	7	8	7	24	21	0	7	8	7	24	20	3
25	Tuesday..	7	5	7	19	20	10	7	40	7	54	21	4	7	40	7	54	20	7
26	Wednesday	7	35	7	51	20	11	8	10	8	26	21	5	8	10	8	26	20	8
27	Thursday.	8	7	8	25	20	8	8	42	9	0	21	2	8	42	9	0	20	5
28	Friday ..	8	43	9	1	20	0	9	18	9	36	20	6	9	18	9	36	19	10
29	Saturday..	9	18	9	35	19	1	9	53	10	10	19	7	9	53	10	10	19	0

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 1st, 6h. 15m. p.m. | Last Quarter. 15th, 9h. 16m. a.m.
 Full Moon .. 8th, 9h. 35m. a.m. | New Moon .. 23rd, 2h. 20m. p.m.

M. D.	W. D.	Newport.				Swansea.				Liverpool.				London.			
		Morn.		Even		Morn.		Even		Morn		Even		Morn.		Even.	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	Sat	11 33	11 55	23	2	10 48	11 8	18	4	3 43	4 7	6 36	7 0				
2	Sun	..	0 22	21	8	11 32	..	17	2	4 33	5 4	7 24	7 50				
3	Mo	0 55	1 34	21	0	0 1	0 38	16	9	5 41	6 25	8 20	8 58				
4	Tu	2 14	2 55	22	1	1 19	2 4	17	6	7 7	7 47	9 37	10 16				
5	Wd	3 40	4 22	24	4	2 49	3 29	19	2	8 26	9 1	10 57	11 38				
6	Th	5 2	5 36	27	6	4 5	4 37	21	3	9 32	9 58	..	0 14				
7	Fri	6 6	6 37	30	2	5 7	5 38	23	1	10 23	10 50	0 46	1 14				
8	Sat	7 5	7 31	31	8	6 6	6 30	23	11	11 16	11 41	1 40	2 7				
9	Sun	7 55	8 18	32	6	6 54	7 17	24	9	..	0 5	2 32	2 56				
10	Mo	8 41	9 23	33	0	7 40	8 25	1	1	0 28	0 52	3 19	3 41				
11	Tu	9 22	9 43	32	0	8 24	8 46	24	6	1 14	1 35	4 4	4 26				
12	Wd	10 0	10 17	30	6	9 6	9 25	23	4	1 56	2 16	4 47	5 9				
13	Th	10 35	10 50	28	1	9 44	10 22	1	8	2 35	2 56	5 29	5 49				
14	Fri	11 7	11 27	25	4	10 21	10 42	19	9	3 15	3 36	6 11	6 31				
15	Sat	11 47	..	22	7	11 21	11 24	17	10	4 0	4 24	6 53	7 17				
16	Sun	0 14	0 44	19	11	11 51	..	16	0	4 55	5 28	7 41	8 11				
17	Mo	1 18	1 59	18	7	0 24	1 4	15	0	6 8	6 52	8 45	9 23				
18	Tu	2 41	3 22	19	0	1 48	2 32	15	4	7 34	8 11	10 2	10 43				
19	Wd	4 6	4 46	20	9	3 14	3 50	16	7	8 48	9 19	11 23	..				
20	Th	5 16	5 40	22	10	4 18	4 42	18	0	9 42	10 2	0 1	0 33				
21	Fri	6 4	6 29	24	11	5 5	5 30	19	6	10 22	10 42	0 57	1 18				
22	Sat	6 50	7 7	25	8	5 51	6 8	20	0	11 2	11 18	1 39	2 0				
23	Sun	7 26	7 43	27	4	6 25	6 41	21	2	11 35	11 52	2 18	2 34				
24	Mo	7 59	8 15	28	5	6 58	7 14	22	0	..	0 9	2 51	3 7				
25	Tu	8 31	8 45	29	1	7 30	7 44	22	5	0 25	0 41	3 23	3 38				
26	Wd	9 0	9 16	29	3	8 0	8 16	22	6	0 56	1 12	3 54	4 8				
27	Th	9 30	9 46	28	9	8 32	8 50	22	2	1 28	1 43	4 24	4 40				
28	Fri	10 2	10 18	27	10	9 8	9 26	21	5	2 0	2 18	4 55	5 13				
29	Sat	10 33	10 48	26	3	9 43	10 0	20	5	2 36	2 54	5 31	5 50				

The above are in Greenwich Mean Time, if local time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 2nd, 4h. 48m. a.m. | New Moon .. 24th, 6h. 59m. a.m.
 Full Moon .. 8th, 8h. 22m. p.m. | First Quarter. 31st, 0h. 25m. p.m.
 Last Quarter. 16th, 3h. 28m. a.m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgewater.					Bristol.							
		Morn.		Even.		Height.	Morn.		Even.		Height.	Morn.		Even.		Height.			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Sunday ..	9	46	10	9	24	5	11	27	11	48	11	7	11	7	11	28	23	11
2	Monday..	10	32	11	0	23	3	..	0	14	10	1	11	54	..	..	21	10	..
3	Tuesday..	11	34	..	..	22	7	0	45	1	23	9	3	0	25	1	3	20	7
4	Wednesday	0	17	1	8	22	10	2	9	2	56	9	7	1	49	2	36	21	1
5	Thursday..	1	54	2	39	24	1	3	39	4	26	11	2	3	19	4	6	23	4
6	Friday ..	3	14	3	47	25	10	5	5	5	40	13	4	4	45	5	20	26	6
7	Saturday..	4	18	4	48	27	5	6	12	6	42	15	3	5	52	6	22	29	6
8	Sunday ..	5	15	5	38	28	2	7	9	7	33	16	3	6	49	7	13	30	10
9	Monday..	6	1	6	22	29	0	7	58	8	18	17	3	7	38	7	58	32	4
10	Tuesday..	6	45	7	5	29	3	8	41	9	1	17	7	8	21	8	41	32	9
11	Wednesday	7	25	7	46	28	11	9	20	9	39	17	2	9	0	9	19	32	2
12	Thursday..	8	6	8	25	28	0	9	58	10	15	16	0	9	38	9	55	30	6
13	Friday ..	8	43	8	59	26	8	10	31	10	47	14	4	10	11	10	27	28	1
14	Saturday..	9	18	9	36	25	2	11	1	11	18	12	6	10	41	10	58	25	4
15	Sunday ..	9	57	10	17	23	6	11	37	11	57	10	5	11	17	11	37	22	3
16	Monday..	10	39	11	7	21	10	..	0	22	8	4	..	..	0	2	19	2	2
17	Tuesday..	11	40	..	..	20	10	0	53	1	29	7	0	0	33	1	9	17	4
18	Wednesday	0	19	1	7	20	9	2	11	2	55	6	11	1	51	2	35	17	2
19	Thursday..	1	50	2	28	21	9	3	36	4	15	8	2	3	16	3	55	19	0
20	Friday ..	3	3	3	34	23	1	4	52	5	26	9	11	4	32	5	6	21	7
21	Saturday..	3	59	4	20	24	6	5	52	6	14	11	8	5	32	5	54	24	0
22	Sunday ..	4	42	5	2	25	9	6	36	6	56	13	3	6	16	6	36	26	4
23	Monday ..	5	20	5	36	26	3	7	14	7	31	13	10	6	54	7	11	27	4
24	Tuesday..	5	53	6	10	27	1	7	49	8	7	14	11	7	29	7	47	28	10
25	Wednesday	6	26	6	43	27	8	8	22	8	39	15	7	8	2	8	19	29	11
26	Thursday..	6	59	7	17	27	9	8	55	9	13	15	9	8	35	8	53	30	1
27	Friday ..	7	35	7	53	27	6	9	30	9	46	15	5	9	10	9	26	29	8
28	Saturday..	8	12	8	31	26	10	10	3	10	20	14	7	9	43	10	0	28	4
29	Sunday ..	8	50	9	10	25	11	10	37	10	56	13	5	10	17	10	36	26	8
30	Monday..	9	33	9	55	24	9	11	14	11	35	12	0	10	54	11	15	24	6
31	Tuesday..	10	20	10	49	23	6	12	0	..	10	5	11	40	..	..	22	3	3

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter 2nd, 4h. 48m. a.m. | New Moon .. 24th, 6h. 59m. a.m.
 Full Moon .. 8th, 8h. 22m. p.m. | First Quarter. 31st, 0h. 25m. p.m.
 Last Quarter. 16th, 3h. 28m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Sunday ..	10	21	10	44	18	1	10	59	11	20	25	5
2	Monday ..	11	7	11	35	16	7	11	46	..	23	8	
3	Tuesday ..	..	0	9	15	9		0	17	0	55	22	7
4	Wednesday ..	0	52	1	43	16	1	1	41	2	28	23	0
5	Thursday ..	2	29	3	14	17	8	3	11	3	58	24	11
6	Friday ..	3	49	4	22	19	10	4	37	5	12	27	8
7	Saturday ..	4	53	5	23	21	10	5	44	6	14	30	2
8	Sunday ..	5	50	6	13	22	9	6	41	7	5	31	4
9	Monday ..	6	36	6	57	23	9	7	30	7	50	32	7
10	Tuesday ..	7	20	7	40	24	1	8	13	8	33	33	0
11	Wednesday ..	8	0	8	21	23	8	8	52	9	11	32	6
12	Thursday ..	8	41	9	0	22	6	9	30	9	47	31	1
13	Friday ..	9	18	9	34	20	10	10	3	10	19	29	0
14	Saturday ..	9	53	10	11	19	0	10	33	10	50	26	7
15	Sunday ..	10	32	10	52	16	11	11	9	11	29	24	0
16	Monday ..	11	14	11	42	14	10	11	54	..	21	5	
17	Tuesday ..	..	0	15	13	6		0	25	1	1	19	10
18	Wednesday ..	0	54	1	42	13	5	1	43	2	27	19	8
19	Thursday ..	2	25	3	3	14	8	3	8	3	47	21	3
20	Friday ..	3	38	4	9	16	5	4	24	4	58	23	5
21	Saturday ..	4	34	4	55	18	2	5	24	5	46	25	6
22	Sunday ..	5	17	5	37	19	9	6	8	6	28	27	6
23	Monday ..	5	55	6	11	20	4	6	46	7	3	28	4
24	Tuesday ..	6	28	6	45	21	5	7	21	7	39	29	8
25	Wednesday ..	7	1	7	18	22	1	7	54	8	11	30	7
26	Thursday ..	7	34	7	52	22	3	8	27	8	45	30	9
27	Friday ..	8	10	8	28	21	11	9	2	9	18	30	4
28	Saturday ..	8	47	9	6	21	1	9	35	9	52	29	3
29	Sunday ..	9	25	9	45	19	11	10	9	10	28	27	10
30	Monday ..	10	8	10	30	18	6	10	46	11	7	26	0
31	Tuesday ..	10	55	11	24	16	11	11	32	..	24	0	

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10 m.
 For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 2nd, 4h. 48m. a.m. | New Moon .. 24th, 6h. 59m. a.m.
 Full Moon .. 8th, 8h. 22m. p.m. | First Quarter. 31st, 0h. 25m. p.m.
 Last Quarter.. 16th, 3h. 28m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Sunday ..	9	56	10	19	17	11	10	31	10	54	18	5
2	Monday ..	10	42	11	10	16	8	11	17	11	45	17	2
3	Tuesday ..	11	44	..	..	15	11	..	0	19	16	5	..
4	Wednesday	0	27	1	18	16	2	1	2	1	53	16	8
5	Thursday ..	2	4	2	49	17	7	2	39	3	24	18	1
6	Friday ..	3	24	3	57	19	6	3	59	4	32	20	0
7	Saturday ..	4	26	4	58	21	3	5	3	5	33	21	9
8	Sunday ..	5	25	5	48	22	0	6	0	6	23	22	6
9	Monday ..	6	11	6	32	22	11	6	46	7	7	23	5
10	Tuesday ..	6	55	7	15	23	2	7	30	7	50	23	8
11	Wednesday	7	35	7	56	22	10	8	10	8	31	23	4
12	Thursday ..	8	16	8	35	21	10	8	51	9	10	22	4
13	Friday ..	8	53	9	9	20	4	9	28	9	44	20	10
14	Saturday ..	9	28	9	46	18	9	10	3	10	21	19	3
15	Sunday ..	10	7	10	27	16	11	10	42	11	2	17	5
16	Monday ..	10	50	11	17	15	1	11	24	11	52	15	7
17	Tuesday ..	11	50	..	..	13	11	..	0	25	14	5	..
18	Wednesday	0	29	1	17	13	10	1	4	1	52	14	4
19	Thursday ..	2	0	2	38	15	0	2	35	3	13	15	6
20	Friday ..	3	13	3	44	16	6	3	48	4	19	17	0
21	Saturday ..	4	9	4	30	18	0	4	44	5	5	18	6
22	Sunday ..	4	52	5	12	19	5	5	27	5	47	19	11
23	Monday ..	5	30	5	46	19	11	6	5	6	21	20	5
24	Tuesday ..	6	3	6	20	20	10	6	38	6	55	21	4
25	Wednesday	6	36	6	53	21	6	7	11	7	28	22	0
26	Thursday ..	7	9	7	27	21	7	7	44	8	2	22	1
27	Friday ..	7	45	8	3	21	4	8	20	8	38	21	10
28	Saturday ..	8	22	8	41	20	7	8	57	9	16	21	1
29	Sunday ..	9	0	9	20	19	7	9	35	9	55	20	1
30	Monday ..	9	43	10	5	18	4	10	18	10	40	18	10
31	Tuesday ..	10	30	10	59	16	11	11	5	11	34	17	5

The above are in Greenwich Mean Time, if local Time be required for
 Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 2nd, 4h. 48m. a.m.

New Moon .. 24th, 6h. 59m. a.m.

Full Moon .. 8th, 8h. 22m. p.m.

First Quarter. 31st, 0h. 25m. p.m.

Last Quarter. 16th, 3h. 28m. a.m.

M. D.	W. D.	Newport.					Swansea.					Liverpool.				London.			
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.	
		H. M.	H. M.	H. M.	F. I.		H. M.	H. M.	H. M.	F. I.		H. M.	H. M.	H. M.		H. M.	H. M.	H. M.	
1	Sun	11 7	11 28	24 2			10 21	10 44	19 1			3 18	3 36	6 9		6 29			
2	Mo	11 54	..	22 3			11 7	11 35	17 7			4 2	4 32	6 53		7 19			
3	Tu	0 25	1 3	21 0			..	0 9	16 9			5 8	5 50	7 49		8 24			
4	Wd	1 49	2 36	21 6			0 52	1 43	17 1			6 42	7 29	9 7		9 52			
5	Th	3 19	4 6	23 8			2 29	3 14	18 8			8 8	8 48	10 38		11 20			
6	Fri	4 45	5 20	26 11			3 49	4 22	20 10			9 18	9 45	..		0 1			
7	Sat	5 52	6 22	29 9			4 53	5 23	22 10			10 11	10 36	0 32		1 0			
8	Sun	6 49	7 13	31 1			5 50	6 13	23 9			11 1	11 23	1 28		1 54			
9	Mo	7 38	7 58	32 6			6 36	6 57	24 9			11 47	..	2 17		2 39			
10	Tu	8 21	8 41	33 0			7 20	7 40	25 1			0 8	0 31	3 2		3 22			
11	Wd	9 0	9 19	32 4			8 0	8 21	24 8			0 52	1 12	3 44		4 4			
12	Th	9 38	9 55	30 9			8 41	9 0	23 6			1 32	1 51	4 24		4 44			
13	Fri	10 11	10 27	28 4			9 18	9 34	21 10			2 10	2 28	5 4		5 23			
14	Sat	10 41	10 58	25 8			9 53	10 11	20 0			2 45	3 5	5 41		5 59			
15	Sun	11 17	11 37	22 8			10 32	10 52	17 11			3 25	3 48	6 20		6 41			
16	Mo	..	0 2	19 7			11 14	11 42	15 10			4 12	4 41	7 5		7 29			
17	Tu	0 33	1 9	17 9			..	0 15	14 6			5 17	5 57	7 58		8 33			
18	Wd	1 51	2 35	17 7			0 54	1 42	14 5			6 44	7 28	9 13		9 54			
19	Th	3 16	3 55	19 5			2 25	3 3	15 8			8 5	8 38	10 37		11 17			
20	Fri	4 32	5 6	22 0			3 38	4 9	17 5			9 8	9 34	11 51		..			
21	Sat	5 32	5 54	24 4			4 34	4 55	19 2			9 55	10 13	0 22		0 49			
22	Sun	6 16	6 36	26 9			5 17	5 37	20 9			10 31	10 49	1 11		1 30			
23	Mo	6 54	7 11	27 8			5 55	6 11	21 4			11 6	11 21	1 49		2 6			
24	Tu	7 29	7 47	29 1			6 28	6 45	22 5			11 39	11 56	2 22		2 37			
25	Wd	8 2	8 19	30 2			7 1	7 18	23 1			..	0 12	2 54		3 11			
26	Th	8 35	8 53	30 4			7 34	7 52	23 3			0 29	0 45	3 26		3 42			
27	Fri	9 10	9 26	29 11			8 10	8 28	22 11			1 4	1 22	3 58		4 16			
28	Sat	9 43	10 0	28 7			8 47	9 6	22 1			1 39	1 57	4 34		4 51			
29	Sun	10 17	10 36	27 1			9 25	9 45	20 11			2 16	2 35	5 10		5 29			
30	Mo	10 54	11 15	24 11			10 8	10 30	19 6			2 57	3 21	5 49		6 12			
31	Tu	11 40	..	22 8			10 55	11 24	17 11			3 46	4 16	6 37		7 3			

The above are in Greenwich Mean Time, if local Time be required for
Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

Full Moon .. 7th, 7h. 16m. a.m.	New Moon .. 22nd, 8h. 19m. p.m.
Last Quarter . 14th, 10h. 34m. p.m.	First Quarter. 29th, 6h. 17m. p.m.

The above are in Greenwich Mean Time, if local Time be required for
Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.
For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 7th, 7h. 16m. a.m. | New Moon .. 22nd, 8h. 19m. p.m.
 Last Quarter. 14th, 10h. 34m. p.m. | First Quarter. 29th, 6h. 17m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.					Cardiff.					Gloucester.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	11	57	..	..	15	10	0	5	0	43	22	9	0	58	1	36	18	11
2	Thursday..	0	40	1	29	16	1	1	28	2	15	23	0	2	21	3	8	19	3
3	Friday ..	2	16	2	55	17	8	2	59	3	38	24	11	3	52	4	31	21	7
4	Saturday..	3	32	4	3	19	9	4	18	4	52	27	6	5	11	5	45	24	11
5	Sunday ..	4	33	5	2	21	6	5	23	5	53	29	9	6	16	6	46	27	9
6	Monday ..	5	26	5	51	22	9	6	17	6	42	31	4	7	10	7	35	29	8
7	Tuesday..	6	14	6	34	23	3	7	6	7	28	31	11	7	59	8	21	30	5
8	Wednesday	6	54	7	14	23	6	7	47	8	7	32	2	8	40	9	0	30	9
9	Thursday	7	34	7	53	23	1	8	27	8	46	31	8	9	20	9	39	30	1
10	Friday ..	8	11	8	30	22	0	9	3	9	20	30	6	9	56	10	13	28	7
11	Saturday..	8	48	9	5	20	7	9	36	9	51	28	7	10	29	10	45	26	3
12	Sunday ..	9	23	9	42	18	11	10	8	10	24	26	6	11	1	11	17	23	7
13	Monday..	10	1	10	22	17	0	10	41	11	0	24	2	11	34	11	53	20	8
14	Tuesday..	10	44	11	9	15	3	11	20	11	48	22	0	..	0	13	18	0	0
15	Wednesday	11	37	..	..	13	11	..	0	20	20	5	0	0	41	1	13	16	0
16	Thursday.	0	9	0	47	13	6	0	55	1	36	19	10	1	48	2	29	15	3
17	Friday ..	1	29	2	10	14	4	2	15	2	54	20	10	3	8	3	47	16	7
18	Saturday..	2	48	3	20	16	1	3	30	4	5	23	0	4	23	4	58	19	3
19	Sunday ..	3	48	4	12	17	10	4	36	5	2	25	2	5	29	5	55	21	11
20	Monday..	4	35	4	55	19	6	5	25	5	46	27	3	6	18	6	39	24	7
21	Tuesday..	5	14	5	34	20	10	6	5	6	26	29	0	6	58	7	19	26	9
22	Wednesday	5	54	6	14	21	5	6	45	7	6	29	8	7	38	7	59	27	7
23	Thursday.	6	31	6	51	22	1	7	24	7	44	30	7	8	17	8	37	28	9
24	Friday ..	7	9	7	27	22	5	8	2	8	20	31	0	8	55	9	13	29	3
25	Saturday..	7	47	8	6	22	1	8	40	8	58	30	7	9	33	9	51	28	9
26	Sunday ..	8	27	8	49	21	6	9	17	9	37	29	9	10	10	10	30	27	9
27	Monday..	9	12	9	34	20	4	9	58	10	18	28	4	10	51	11	11	25	11
28	Tuesday..	9	57	10	24	18	11	10	37	11	2	26	6	11	30	11	55	23	7
29	Wednesday	10	51	11	20	17	4	11	28	11	59	24	6	..	0	21	21	2	2
30	Thursday.	11	53	..	..	16	3	..	0	8	7	23	3	0	53	1	30	19	7

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 7th, 7h. 16m. a.m. | New Moon .. 22nd, 8h. 19m. p.m.
 Last Quarter 14th, 10h. 34m. p.m. | First Quarter 29th, 6h. 17m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Wednesdy	11 33	..	16 0	..	0 7	16 6	..	0 7	16 2	..	0 7	16 2
2	Thursday..	0 15	1 4	16 2	0 50	1 39	16 8	0 50	1 39	16 4	0 50	1 39	16 4
3	Friday ..	1 51	2 30	17 7	2 26	3 5	18 1	2 26	3 5	17 7	2 26	3 5	17 7
4	Saturday..	3 7	3 38	19 5	3 42	4 13	19 11	3 42	4 13	19 3	3 42	4 13	19 3
5	Sunday ..	4 8	4 37	20 11	4 43	5 12	21 5	4 43	5 12	20 8	4 43	5 12	20 8
6	Monday..	5 1	5 26	22 0	5 36	6 1	22 6	5 36	6 1	21 8	5 36	6 1	21 8
7	Tuesday..	5 49	6 9	22 6	6 24	6 44	23 0	6 24	6 44	22 1	6 24	6 44	22 1
8	Wednesdy	6 29	6 49	22 8	7 4	7 24	23 2	7 4	7 24	22 3	7 4	7 24	22 3
9	Thursday..	7 9	7 28	22 4	7 44	8 3	22 10	7 44	8 3	21 11	7 44	8 3	21 11
10	Friday ..	7 46	8 5	21 5	8 21	8 40	21 11	8 21	8 40	21 1	8 21	8 40	21 1
11	Saturday .	8 23	8 40	20 1	8 58	9 15	20 7	8 58	9 15	19 11	8 58	9 15	19 11
12	Sunday ..	8 58	9 17	18 8	9 33	9 52	19 2	9 33	9 52	18 7	9 33	9 52	18 7
13	Monday..	9 36	9 57	17 0	10 11	10 32	17 6	10 11	10 32	17 1	10 11	10 32	17 1
14	Tuesday..	10 19	10 44	15 6	10 54	11 19	16 0	10 54	11 19	15 8	10 54	11 19	15 8
15	Wednesdy	11 12	11 44	14 4	11 47	..	14 10	11 47	..	14 8	11 47	..	14 8
16	Thursday..	..	0 22	13 11	0 19	0 57	14 5	0 19	0 57	14 4	0 19	0 57	14 4
17	Friday ..	1 4	1 45	14 8	1 39	2 20	15 2	1 39	2 20	15 0	1 39	2 20	15 0
18	Saturday..	2 23	2 55	16 2	2 58	3 30	16 8	2 58	3 30	16 4	2 58	3 30	16 4
19	Sunday ..	3 23	3 47	17 9	3 58	4 22	18 3	3 58	4 22	17 9	3 58	4 22	17 9
20	Monday ..	4 10	4 30	19 2	4 45	5 5	19 8	4 45	5 5	19 1	4 45	5 5	19 1
21	Tuesday..	4 49	5 9	20 4	5 21	5 44	20 10	5 24	5 44	20 2	5 24	5 44	20 2
22	Wednesdy	5 29	5 49	20 10	6 4	6 24	21 4	6 4	6 24	20 7	6 4	6 24	20 7
23	Thursday..	6 6	6 26	21 6	6 41	7 1	22 0	6 41	7 1	21 2	6 41	7 1	21 2
24	Friday ..	6 44	7 2	21 9	7 19	7 37	22 3	7 19	7 37	21 5	7 19	7 37	21 5
25	Saturday .	7 22	7 41	21 6	7 57	8 16	22 0	7 57	8 16	21 2	7 57	8 16	21 2
26	Sunday ..	8 2	8 24	20 11	8 37	8 59	21 5	8 37	8 59	20 8	8 37	8 59	20 8
27	Monday..	8 47	9 9	19 11	9 22	9 44	20 5	9 22	9 44	19 9	9 22	9 44	19 9
28	Tuesday..	9 32	9 59	18 8	10 7	10 34	19 2	10 7	10 34	18 7	10 7	10 34	18 7
29	Wednesdy	10 26	10 55	17 4	11 1	11 30	17 10	11 1	11 30	17 4	11 1	11 30	17 4
30	Thursday.	11 28	..	16 4	..	0 3	16 10	..	0 3	16 6	..	0 3	16 6

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 7th, 7h. 16m. a.m. | New Moon .. 22nd, 8h. 19m. p.m.
 Last Quarter. 14th, 10h. 34m. p.m. | First Quarter. 29th, 6h. 17m. p.m.

M. D.	W. D.	Newport.				Swansea.				Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.
1	Wd	0	13	0	51	21	2	11	57	..	..	16	10	4	54	5	36
2	Th	1	36	2	23	21	6	0	40	1	29	17	1	6	27	7	16
3	Fri	3	7	3	46	23	8	2	16	2	55	18	8	7	57	8	31
4	Sat	4	26	5	0	26	9	3	32	4	3	20	9	9	8	9	30
5	Sun	5	31	6	1	29	3	4	33	5	2	22	6	9	54	10	19
6	Mo	6	25	6	50	31	1	5	26	5	51	23	9	10	39	11	2
7	Tu	7	14	7	36	31	8	6	14	6	34	24	3	11	24	11	45
8	Wd	7	55	8	15	32	0	6	54	7	14	24	6	..	0	5	2
9	Th	8	35	8	54	31	5	7	34	7	53	24	1	0	25	0	45
10	Fri	9	11	9	28	30	1	8	11	8	30	23	0	1	5	1	23
11	Sat	9	44	9	59	27	11	8	48	9	5	21	7	1	41	1	58
12	Sun	10	16	10	32	25	6	9	23	9	42	19	11	2	15	2	34
13	Mo	10	49	11	8	22	10	10	1	10	22	18	0	2	53	3	14
14	Tu	11	28	11	56	20	3	10	44	11	9	16	3	3	37	4	2
15	Wd	..	..	0	28	18	5	11	37	..	..	14	11	4	34	5	11
16	Th	1	3	1	44	17	9	0	9	0	47	14	6	5	50	6	36
17	Fri	2	23	3	2	19	0	1	29	2	10	15	4	7	16	7	52
18	Sat	3	38	4	13	21	6	2	48	3	20	17	1	8	25	8	53
19	Sun	4	44	5	10	23	11	3	48	4	12	18	10	9	17	9	37
20	Mo	5	33	5	54	26	5	4	35	4	55	20	6	9	56	10	13
21	Tu	6	13	6	34	28	4	5	14	5	34	21	10	10	28	10	47
22	Wd	6	53	7	14	29	1	5	54	6	14	22	5	11	5	11	24
23	Th	7	32	7	52	30	2	6	31	6	51	23	1	11	42	..	..
24	Fri	8	10	8	28	30	8	7	9	7	27	23	5	0	2	0	20
25	Sat	8	48	9	6	30	2	7	47	8	6	23	1	0	38	0	59
26	Sun	9	25	9	45	29	3	8	27	8	49	22	6	1	18	1	38
27	Mo	10	6	10	26	27	8	9	12	9	34	21	4	1	59	2	22
28	Tu	10	45	11	10	25	6	9	57	10	24	19	11	2	45	3	9
29	Wd	11	36	..	..	23	2	10	51	11	20	18	4	3	39	4	11
30	Th	0	8	0	45	21	10	11	53	..	..	17	3	4	49	5	30

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 6th, 6h. 36m. p.m. | New Moon .. 22nd, 6h. 35m. a.m.
 Last Quarter . 14th, 5h. 15m. p.m. | First Quarter. 28th, 11h. 41m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.	
1	Friday ..	..	0 37	23	2	1 46	2 27	10 0		1 26	2 7	21	8
2	Saturday..	1 20	1 59	24	1	3 7	3 44	11 2		2 47	3 24	23	4
3	Sunday ..	2 34	3 5	25	5	4 20	4 55	12 10		4 0	4 35	25	9
4	Monday..	3 34	4 1	26	7	5 26	5 55	14 3		5 6	5 35	28	0
5	Tuesday..	4 27	4 52	27	4	6 21	6 47	15 2		6 1	6 27	29	4
6	Wednesdy	5 16	5 37	27	8	7 10	7 32	15 7		6 50	7 12	29	11
7	Thursday.	5 56	6 13	27	10	7 52	8 10	15 10		7 32	7 50	30	3
8	Friday ..	6 32	6 51	27	7	8 28	8 47	15 6		8 8	8 27	29	10
9	Saturday..	7 10	7 28	26	11	9 6	9 23	14 8		8 46	9 3	28	6
10	Sunday ..	7 48	8 6	26	1	9 41	9 58	13 8		9 21	9 38	27	0
11	Monday..	8 24	9 43	25	0	10 14	10 31	12 3		9 54	10 11	25	0
12	Tuesday..	9 2	9 23	23	10	10 48	11 6	10 10		10 28	10 46	22	10
13	Wednesdy	9 44	10 5	22	10	11 25	11 45	9 7		11 5	11 25	21	1
14	Thursday.	10 29	10 55	21	10	..	0 9	8 4		11 49	..	19	2
15	Friday ..	11 24	11 57	21	4	0 40	1 12	7 7		0 20	0 52	18	4
16	Saturday..	..	0 32	21	8	1 48	2 22	8 0		1 28	2 2	18	10
17	Sunday ..	1 8	1 43	22	6	2 56	3 29	9 2		2 36	3 9	20	6
18	Monday..	2 15	2 45	23	10	4 1	4 33	10 10		3 41	4 13	22	10
19	Tuesday..	3 9	3 34	25	2	5 0	5 26	12 6		4 40	5 6	25	4
20	Wednesdy	3 59	4 22	26	4	5 52	6 16	13 11		5 32	5 56	27	6
21	Thursday.	4 44	5 7	27	3	6 38	7 2	15 1		6 18	6 42	29	2
22	Friday ..	5 30	5 51	27	7	7 24	7 47	15 6		7 4	7 27	29	10
23	Saturday.	6 12	6 34	28	0	8 9	8 30	16 0		7 49	8 10	30	6
24	Sunday ..	6 55	7 18	27	11	8 51	9 14	15 11		8 31	8 54	30	5
25	Monday..	7 41	8 5	27	5	9 36	9 57	15 3		9 16	9 37	29	6
26	Tuesday..	8 29	8 53	26	8	10 19	10 40	14 4		9 59	10 20	28	1
27	Wednesdy	9 18	9 44	25	8	11 1	11 25	13 1		10 41	11 5	26	2
28	Thursday.	10 11	10 39	24	7	11 51	..	11 9		11 31	..	24	2
29	Friday ..	11 9	11 40	23	8	0 22	0 56	10 7		0 2	0 36	22	7
30	Saturday..	..	0 11	23	4	1 29	2 3	10 2		1 9	1 43	22	0
31	Sunday ..	0 47	1 25	23	9	2 37	3 12	10 9		2 17	2 52	22	9

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 6th, 6h. 36m. p.m. | New Moon .. 22nd, 6h. 35m. a.m.
 Last Quarter 14th, 5h. 15m. p.m. | First Quarter 28th, 11h. 41m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.						Cardiff.						Gloucester.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	0	30	1	12	16	6	1	18	1	59	23	6	2	11	2	52	19	11
2	Saturday..	1	55	2	34	17	8	2	39	3	16	24	11	3	32	4	9	21	7
3	Sunday ..	3	9	3	40	19	4	3	52	4	27	27	0	4	45	5	20	24	3
4	Monday..	4	9	4	36	20	9	4	58	5	27	28	11	5	51	6	20	26	7
5	Tuesday..	5	2	5	27	21	8	5	53	6	19	30	0	6	46	7	12	28	1
6	Wednesday	5	51	6	12	22	1	6	42	7	4	30	7	7	35	7	57	28	9
7	Thursday.	6	31	6	48	22	4	7	24	7	42	30	10	8	17	8	35	29	1
8	Friday ..	7	7	7	26	22	0	8	0	8	19	30	6	8	53	9	12	28	7
9	Saturday .	7	45	8	3	21	2	8	38	8	55	29	5	9	31	9	48	27	3
10	Sunday ..	8	23	8	41	20	2	9	13	9	30	28	1	10	6	10	23	25	7
11	Monday..	8	59	9	18	18	9	9	46	10	3	26	5	10	39	10	56	23	6
12	Tuesday..	9	37	9	58	17	4	10	20	10	38	24	6	11	13	11	31	21	2
13	Wednesday	10	19	10	40	16	1	10	57	11	17	23	0	11	50	..	..	19	3
14	Thursday.	11	4	11	30	14	10	11	41	..	..	21	5	0	10	0	34	17	3
15	Friday ..	11	59	..	..	14	1	0	12	0	44	20	7	1	5	1	37	16	3
16	Saturday..	0	32	1	7	14	6	1	20	1	54	21	1	2	13	2	47	16	11
17	Sunday ..	1	43	2	18	15	8	2	28	3	1	22	6	3	21	3	54	18	7
18	Monday..	2	50	3	20	17	4	3	33	4	5	24	6	4	26	4	58	21	2
19	Tuesday..	3	44	4	9	19	0	4	32	4	58	26	7	5	25	5	51	23	9
20	Wednesday	4	34	4	57	20	5	5	24	5	48	28	6	6	17	6	41	26	1
21	Thursday.	5	19	5	42	21	7	6	10	6	34	29	11	7	3	7	27	27	11
22	Friday ..	6	5	6	26	22	0	6	56	7	19	30	6	7	49	8	12	28	7
23	Saturday..	6	47	7	9	22	6	7	41	8	2	31	1	8	34	8	55	29	5
24	Sunday ..	7	30	7	53	22	5	8	23	8	46	31	0	9	16	9	39	29	3
25	Monday..	8	16	8	40	21	10	9	8	9	29	30	2	10	1	10	22	28	3
26	Tuesday..	9	4	9	28	20	10	9	51	10	12	29	0	10	44	11	5	26	9
27	Wednesday	9	53	10	19	19	7	10	33	10	57	27	5	11	26	11	50	24	9
28	Thursday.	10	46	11	14	18	3	11	23	11	54	25	8	..	..	0	16	22	7
29	Friday ..	11	44	..	..	17	1	..	0	28	24	3	0	0	47	1	21	20	10
30	Saturday .	0	15	0	46	16	8	1	1	1	35	23	9	1	54	2	28	20	3
31	Sunday ..	1	22	2	0	17	8	2	9	2	44	24	5	3	2	3	37	21	0

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10 m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 6th, 6h. 36m. p.m. | New Moon .. 22nd, 6h. 35m. a.m.
 Last Quarter .. 14th, 5h. 15m. p.m. | First Quarter .. 28th, 11h. 41m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Friday ..	0 5	0 47	16 7	16 7	0 40	1 22	17 1	17 1	0 40	1 22	16 8	16 8
2	Saturday ..	1 30	2 9	17 7	17 7	2 5	2 44	18 1	18 1	2 5	2 44	17 7	17 7
3	Sunday ..	2 44	3 15	19 0	19 0	3 19	3 50	19 6	19 6	3 19	3 50	18 11	18 11
4	Monday ..	3 44	4 11	20 3	20 3	4 19	4 46	20 9	20 9	4 19	4 46	20 1	20 1
5	Tuesday ..	4 37	5 22	1 1	1 1	5 12	5 37	21 7	21 7	5 12	5 37	20 10	20 10
6	Wednesday ..	5 26	5 47	21 6	21 6	6 1	6 22	22 0	22 0	6 1	6 22	21 2	21 2
7	Thursday ..	6 6	6 23	21 8	21 8	6 41	6 58	22 2	22 2	6 41	6 58	21 4	21 4
8	Friday ..	6 42	7 12	5 5	5 5	7 17	7 36	21 11	21 11	7 17	7 36	21 1	21 1
9	Saturday ..	7 20	7 38	20 8	20 8	7 55	8 13	21 2	21 2	7 55	8 13	20 5	20 5
10	Sunday ..	7 58	8 16	19 9	19 9	8 33	8 51	20 3	20 3	8 33	8 51	19 7	19 7
11	Monday ..	8 34	8 53	18 7	18 7	9 9	9 28	19 1	19 1	9 9	9 28	18 6	18 6
12	Tuesday ..	9 12	9 33	17 4	17 4	9 47	10 8	17 10	17 10	9 47	10 8	17 4	17 4
13	Wednesday ..	9 54	10 15	16 2	16 2	10 29	10 50	16 8	16 8	10 29	10 50	16 4	16 4
14	Thursday ..	10 39	11 5	15 1	15 1	11 14	11 40	15 7	15 7	11 14	11 40	15 4	15 4
15	Friday ..	11 34	..	14 6	14 6	..	0 9	15 0	15 0	..	0 9	14 10	14 10
16	Saturday ..	0 7	0 42	14 10	14 10	0 42	1 17	15 4	15 4	0 42	1 17	15 2	15 2
17	Sunday ..	1 18	1 53	15 10	15 10	1 53	2 28	16 4	16 4	1 53	2 28	16 0	16 0
18	Monday ..	2 25	2 55	17 4	17 4	3 0	3 30	17 10	17 10	3 0	3 30	17 4	17 4
19	Tuesday ..	3 19	3 44	18 9	18 9	3 54	4 19	19 3	19 3	3 54	4 19	18 8	18 8
20	Wednesday ..	4 9	4 32	20 0	20 0	4 44	5 7	20 6	20 6	4 44	5 7	19 10	19 10
21	Thursday ..	4 54	5 17	21 0	21 0	5 29	5 52	21 6	21 6	5 29	5 52	20 9	20 9
22	Friday ..	5 40	6 1	21 5	21 5	6 15	6 36	21 11	21 11	6 15	6 36	21 1	21 1
23	Saturday ..	6 21	6 44	21 10	21 10	6 57	7 19	22 4	22 4	6 57	7 19	21 6	21 6
24	Sunday ..	7 5	7 28	21 9	21 9	7 40	8 3	22 3	22 3	7 40	8 3	21 5	21 5
25	Monday ..	7 51	8 15	21 3	21 3	8 26	8 50	21 9	21 9	8 26	8 50	20 11	20 11
26	Tuesday ..	8 39	9 3	20 4	20 4	9 14	9 38	20 10	20 10	9 14	9 38	20 2	20 2
27	Wednesday ..	9 28	9 54	19 3	19 3	10 3	10 29	19 9	19 9	10 3	10 29	19 2	19 2
28	Thursday ..	10 21	10 50	18 1	18 1	10 56	11 24	18 7	18 7	10 56	11 24	18 1	18 1
29	Friday ..	11 19	11 50	17 1	17 1	11 54	..	17 7	17 7	11 54	..	17 2	17 2
30	Saturday ..	..	0 21	16 9	16 9	0 25	0 56	17 3	17 3	0 25	0 56	16 10	16 10
31	Sunday ..	0 57	1 35	17 3	17 3	1 32	2 10	17 9	17 9	1 32	2 10	17 3	17 3

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 6th, 6h. 36m. p.m. | New Moon .. 22nd, 6h. 35m. a.m.
 Last Quarter. 14th, 5h. 15m. p.m. | First Quarter. 28th, 11h. 41m. p.m.

M. D.	W. D.	Newport.					Swansea.					Liverpool.				London.			
		Morn.		Even		Height	Morn.		Even.		Height	Morn		Even		Morn.		Even.	
		H. M.	H. M.	F. I.	F. I.		H. M.	H. M.	F. I.	F. I.		H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	Fri	1 26	2 7	22	1		0 30	1 12	17	6		6 16	7 0			8 47	9 29		
2	Sat	2 47	3 24	23	8		1 55	2 34	18	8		7 39	8 13			10 10	10 49		
3	Sun	4 0	4 35	26	1		3 9	3 40	20	4		8 43	9 10			11 25	11 56		
4	Mo	5 6	5 35	28	3		4 9	4 36	21	9		9 34	9 57			..	0 24		
5	Tu	6 1	6 27	29	7		5 2	5 27	22	8		10 19	10 40			0 49	1 13		
6	Wd	6 50	7 12	30	2		5 51	6 12	23	1		11 2	11 22			1 36	1 58		
7	Th	7 32	7 50	30	6		6 31	6 48	23	4		11 42	11 59			2 18	2 38		
8	Fri	8 8	8 27	30	1		7 7	7 26	23	0		..	0 18			2 57	3 14		
9	Sat	8 46	9 3	28	9		7 45	8 3	22	2		0 37	0 57			3 32	3 50		
10	Sun	9 21	9 38	27	4		8 23	8 41	21	2		1 15	1 34			4 9	4 27		
11	Mo	9 54	10 11	25	4		8 59	9 18	19	9		1 51	2 9			4 46	5 4		
12	Tu	10 28	10 46	23	2		9 37	9 58	18	4		2 28	2 48			5 22	5 41		
13	Wd	11 5	11 25	21	6		10 19	10 40	17	1		3 10	3 33			6 3	6 26		
14	Th	11 49	..	19	7		11 4	11 30	15	10		3 58	4 27			6 50	7 15		
15	Fri	0 20	0 52	18	8		11 59	..	15	1		5 2	5 38			7 44	8 18		
16	Sat	1 28	2 2	19	3		0 32	1 7	15	6		6 18	6 55			8 55	9 31		
17	Sun	2 36	3 9	20	11		1 43	2 18	16	8		7 29	7 59			10 5	10 38		
18	Mo	3 41	4 13	23	2		2 50	3 20	18	4		8 27	8 53			11 10	11 39		
19	Tu	4 40	5 6	25	8		3 44	4 9	20	0		9 14	9 34			..	0 6		
20	Wd	5 32	5 56	27	10		4 34	4 57	21	5		9 55	10 15			0 28	0 49		
21	Th	6 18	6 42	29	5		5 19	5 42	22	7		10 33	10 54			1 11	1 32		
22	Fri	7 4	7 27	30	1		6 5	6 26	23	0		11 15	11 36			1 51	2 11		
23	Sat	7 49	8 10	30	9		6 47	7 9	23	6		11 58	..			2 31	2 52		
24	Sun	8 31	8 54	30	8		7 30	7 53	23	5		0 20	0 41			3 13	3 34		
25	Mo	9 16	9 37	29	9		8 16	8 40	22	10		1 5	1 28			3 54	4 17		
26	Tu	9 59	10 20	28	4		9 4	9 28	21	10		1 51	2 14			4 40	5 3		
27	Wd	10 41	11 5	26	7		9 53	10 19	20	7		2 39	3 5			5 27	5 53		
28	Th	11 31	..	24	6		10 46	11 14	19	3		3 33	4 5			6 20	6 50		
29	Fri	0 2	0 36	22	11		11 44	..	18	1		4 41	5 20			7 22	7 58		
30	Sat	1 9	1 43	22	5		0 15	0 46	17	8		5 57	6 35			8 36	9 13		
31	Sun	2 17	2 52	23	1		1 22	2 0	18	3		7 10	7 44			9 46	10 19		

The above are in Greenwich Mean Time, if local time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.
 For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 5th, 6h. 55m. a.m. | New Moon .. 20th, 2h. 45m. p.m.
 Last Quarter. 13th, 10h. 13m. a.m. | First Quarter. 27th, 5h. 50m. a.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Monday..	2	1	2	34	24	8	3	47	4	20	11	10
2	Tuesday..	3	5	3	34	25	6	4	55	5	26	12	11
3	Wednesday	4	1	4	27	26	2	5	55	6	21	13	9
4	Thursday..	4	52	5	16	26	6	6	47	7	10	14	2
5	Friday ..	5	37	5	56	26	7	7	32	7	52	14	3
6	Saturday..	6	14	6	34	26	7	8	11	8	30	14	3
7	Sunday ..	6	52	7	9	26	3	8	48	9	5	13	10
8	Monday..	7	26	7	45	25	9	9	21	9	38	13	3
9	Tuesday..	8	3	8	22	25	2	9	55	10	13	12	6
10	Wednesday	8	41	8	58	24	5	10	29	10	46	11	7
11	Thursday..	9	17	9	38	23	7	11	1	11	19	10	6
12	Friday ..	9	58	10	20	22	11	11	38	12	0	9	8
13	Saturday..	10	42	11	7	22	3	..	0	25	8	10	..
14	Sunday ..	11	35	..	22	1	0	53	1	24	8	8	0
15	Monday..	0	7	0	40	22	4	1	59	2	30	8	11
16	Tuesday..	1	15	1	47	23	3	3	2	3	33	10	1
17	Wednesday	2	20	2	51	24	6	4	6	4	40	11	8
18	Thursday..	3	17	3	45	25	10	5	9	5	38	13	4
19	Friday ..	4	14	4	42	26	11	6	8	6	36	14	8
20	Saturday..	5	7	5	34	27	4	7	2	7	28	15	2
21	Sunday ..	5	56	6	21	27	11	7	52	8	17	15	11
22	Monday..	6	45	7	8	28	2	8	41	9	4	16	3
23	Tuesday..	7	32	7	57	28	0	9	27	9	50	16	0
24	Wednesday	8	23	8	49	27	4	10	13	10	36	15	2
25	Thursday..	9	12	9	36	26	5	10	57	11	18	14	1
26	Friday ..	9	59	10	24	25	4	11	39	..	12	8	11
27	Saturday..	10	48	11	14	24	2	0	4	0	32	11	3
28	Sunday ..	11	43	..	23	4	1	1	1	32	10	2	0
29	Monday..	0	14	0	49	23	1	2	6	2	39	9	11
30	Tuesday..	1	24	2	0	23	5	3	11	3	45	10	4

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 5th, 6h. 55m. a.m. | New Moon .. 20th, 2h. 45m. p.m.
 Last Quarter. 13th, 10h. 13m. a.m. | First Quarter. 27th, 5h. 50m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.					Cardiff.					Gloucester.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H.	M.	H.	M.	F.	H.	M.	H.	M.	F.	H.	M.	H.	M.	F.
1	Monday...	2	36	3	9	18	4	3	19	3	52	25	10	4	12	4
2	Tuesday..	3	40	4	9	19	5	4	27	4	58	27	2	5	20	5
3	Wednesday	4	36	5	2	20	3	5	27	5	53	28	3	6	20	6
4	Thursday..	5	27	5	51	20	8	6	19	6	42	28	9	7	12	7
5	Friday ..	6	12	6	31	20	9	7	4	7	24	28	11	7	57	8
6	Saturday..	6	49	7	9	20	9	7	43	8	2	28	11	8	36	8
7	Sunday ..	7	27	7	44	20	4	8	20	8	37	28	4	9	13	9
8	Monday..	8	1	8	20	19	9	8	53	9	10	27	6	9	46	10
9	Tuesday..	8	38	8	57	19	0	9	27	9	45	26	7	10	20	10
10	Wednesday	9	16	9	33	18	1	10	1	10	18	25	5	10	54	11
11	Thursday	9	52	10	12	17	0	10	33	10	51	24	2	11	26	11
12	Friday ..	10	33	10	55	16	2	11	10	11	32	23	2	..	0	12
13	Saturday..	11	17	11	42	15	4	11	57	..	22	1	0	0	25	0
14	Sunday ..	..	0	10	15	2	0	0	25	0	56	21	10	1	18	1
15	Monday..	0	42	1	15	15	5	1	31	2	2	22	3	2	24	2
16	Tuesday..	1	50	2	22	16	7	2	34	3	5	23	8	3	27	3
17	Wednesday	2	55	3	26	18	2	3	38	4	12	25	6	4	31	4
18	Thursday..	3	52	4	20	19	10	4	41	5	10	27	8	5	34	5
19	Friday ..	4	49	5	17	21	2	5	40	6	8	29	5	6	33	6
20	Saturday..	5	42	6	9	21	8	6	34	7	0	30	0	7	27	7
21	Sunday ..	6	31	6	56	22	5	7	24	7	49	31	0	8	17	8
22	Monday..	7	20	7	43	22	9	8	13	8	36	31	4	9	6	9
23	Tuesday..	8	7	8	32	22	6	8	59	9	22	31	1	9	52	10
24	Wednesday	8	58	9	24	21	8	9	45	10	8	30	0	10	38	11
25	Thursday..	9	47	10	11	20	7	10	29	10	50	28	7	11	22	11
26	Friday ..	10	34	10	59	19	2	11	11	11	36	26	11	..	0	12
27	Saturday..	11	23	11	49	17	9	..	0	4	25	0	0	0	29	0
28	Sunday ..	..	0	18	16	8	0	0	33	1	4	23	9	1	26	1
29	Monday..	0	49	1	24	16	5	1	38	2	11	23	5	2	31	2
30	Tuesday..	1	59	2	35	16	10	2	43	3	17	23	11	3	36	3

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 5th, 6h. 55m. a.m. | New Moon .. 20th, 2h. 45m. p.m.
 Last Quarter. 13th, 10h. 13m. a.m. | First Quarter. 27th, 5h. 50m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Monday ..	2	11	2	44	18	2	2	46	3	19	18	2
2	Tuesday ..	3	15	3	44	19	1	3	50	4	19	19	0
3	Wednesday ..	4	11	4	37	19	10	4	46	5	12	20	8
4	Thursday ..	5	2	5	26	20	2	5	37	6	1	20	0
5	Friday ..	5	47	6	6	20	3	6	22	6	41	20	1
6	Saturday ..	6	24	6	44	20	3	6	59	7	19	20	1
7	Sunday ..	7	2	7	19	19	11	7	37	7	54	19	9
8	Monday ..	7	36	7	55	19	5	8	11	8	30	19	3
9	Tuesday ..	8	13	8	32	18	9	8	48	9	7	18	8
10	Wednesday ..	8	51	9	8	17	11	9	26	9	43	18	5
11	Thursday ..	9	27	9	48	17	0	10	2	10	23	17	6
12	Friday ..	10	8	10	30	16	3	10	43	11	5	16	9
13	Saturday ..	10	52	11	17	15	7	11	27	11	52	16	1
14	Sunday ..	11	45	..	15	5	..	..	0	20	15	11	..
15	Monday ..	0	17	0	50	15	8	0	52	1	25	16	2
16	Tuesday ..	1	25	1	57	16	8	2	0	2	32	17	2
17	Wednesday ..	2	30	3	1	18	0	3	5	3	36	18	6
18	Thursday ..	3	27	3	55	19	6	4	2	4	30	20	0
19	Friday ..	4	24	4	52	20	8	4	59	5	27	21	2
20	Saturday ..	5	17	5	44	21	1	5	52	6	19	21	7
21	Sunday ..	6	6	6	31	21	9	6	41	7	6	22	3
22	Monday ..	6	55	7	18	22	0	7	30	7	53	22	6
23	Tuesday ..	7	42	8	7	21	10	8	17	8	42	22	4
24	Wednesday ..	8	33	8	59	21	1	9	8	9	34	21	7
25	Thursday ..	9	22	9	46	20	1	9	57	10	21	20	7
26	Friday ..	10	10	10	34	18	11	10	44	11	9	19	5
27	Saturday ..	10	58	11	24	17	8	11	33	11	59	18	2
28	Sunday ..	11	53	..	16	9	..	..	0	28	17	8	..
29	Monday ..	0	24	0	59	16	6	0	59	1	34	17	0
30	Tuesday ..	1	34	2	10	16	10	2	9	2	45	17	4

The above are in Greenwich Mean Time, if local Time be required for
 Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 5th, 6h. 55m. a.m. | New Moon .. 20th, 2h. 45m. p.m.
 Last Quarter. 13th, 10h. 13m. a.m. | First Quarter. 27th, 5h. 50m. a.m.

M. D.	W. D.	Newport.				Swansea.				Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Mo	3 27	4 0	24	9	2 36	3 9	19	4	8 15	8 43	10 54	11 27	10 54	11 27		
2	Tu	4 35	5 6	26	3	3 40	4 9	20	5	9 10	9 34	11 56	..	11 56	..		
3	Wd	5 35	6 1	27	6	4 36	5 2	21	3	9 57	10 19	0 24	0 49	0 24	0 49		
4	Th	6 27	6 50	28	1	5 27	5 51	21	8	10 40	11 2	1 13	1 36	1 13	1 36		
5	Fri	7 12	7 32	28	3	6 12	6 31	21	9	11 22	11 42	1 58	2 18	1 58	2 18		
6	Sat	7 51	8 10	28	3	6 49	7 9	21	9	12 0	..	2 38	2 57	2 38	2 57		
7	Sun	8 28	8 45	27	8	7 27	7 44	21	4	0 20	0 38	3 15	3 34	3 15	3 34		
8	Mo	9 1	9 18	26	9	8 1	8 20	20	9	0 56	1 13	3 51	4 8	3 51	4 8		
9	Tu	9 35	9 53	25	8	8 38	8 57	20	0	1 31	1 49	4 25	4 43	4 25	4 43		
10	Wd	10 9	10 26	24	2	9 16	9 33	19	1	2 7	2 26	5 1	5 20	5 1	5 20		
11	Th	10 41	10 59	22	10	9 52	10 13	18	0	2 44	3 4	5 39	5 58	5 39	5 58		
12	Fri	11 18	11 40	21	8	10 33	10 55	17	2	3 27	3 49	6 19	6 43	6 19	6 43		
13	Sat	..	0 5	20	5	11 17	11 42	16	4	4 16	4 45	7 6	7 33	7 6	7 33		
14	Sun	0 33	1 4	20	1	..	0 10	16	2	5 17	5 51	8 1	8 33	8 1	8 33		
15	Mo	1 39	2 10	20	7	0 42	1 15	16	5	6 30	7 3	9 8	9 42	9 8	9 42		
16	Tu	2 42	3 13	22	3	1 50	2 22	17	7	7 35	8 3	10 13	10 44	10 13	10 44		
17	Wd	3 46	4 20	24	4	2 53	3 26	19	2	8 31	8 59	11 14	11 44	11 14	11 44		
18	Th	4 49	5 18	26	11	3 52	4 20	20	10	9 21	9 44	..	0 12	..	0 12		
19	Fri	5 48	6 16	28	9	4 49	5 17	22	2	10 8	10 31	0 35	0 59	0 35	0 59		
20	Sat	6 42	7 8	29	7	5 42	6 9	22	8	10 54	11 19	1 25	1 49	1 25	1 49		
21	Sun	7 32	7 57	30	8	6 31	6 56	23	5	11 42	..	2 11	2 35	2 11	2 35		
22	Mo	8 21	8 44	31	1	7 20	7 43	23	9	0 7	0 31	2 57	3 21	2 57	3 21		
23	Tu	9 7	9 30	30	9	8 7	8 32	23	6	0 55	1 19	3 44	4 7	3 44	4 7		
24	Wd	9 53	10 16	29	7	8 58	9 24	22	8	1 43	2 8	4 31	4 55	4 31	4 55		
25	Th	10 37	10 58	27	11	9 47	10 11	21	7	2 34	2 59	5 21	5 48	5 21	5 48		
26	Fri	11 19	11 44	26	0	10 34	10 59	20	2	3 25	3 51	6 14	6 41	6 14	6 41		
27	Sat	..	0 12	23	9	11 23	11 49	18	9	4 21	4 53	7 8	7 38	7 8	7 38		
28	Sun	0 41	1 12	22	5	..	0 18	17	8	5 25	6 0	8 9	8 42	8 9	8 42		
29	Mo	1 46	2 19	22	0	0 49	1 24	17	5	6 39	7 12	9 16	9 49	9 16	9 49		
30	Tu	2 51	3 25	22	7	1 59	2 35	17	10	7 43	8 14	10 21	10 53	10 21	10 53		

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.
 For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 4th, 8h. 39m. p.m. | New Moon .. 19th, 9h. 56m. p.m.
 Last Quarter . 13th, 0h. 40m. a.m. | First Quarter. 26th, 1h. 51m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn		Even.		Height		M n.		Even.		Height	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Wednesday	2 36	3 7	24	2	4 23	4 57	11	3	4 3	4 37	23	5
2	Thursday	3 36	4 3	24	10	5 29	5 57	12	1	5 9	5 37	24	8
3	Friday ..	4 36	4 56	25	5	6 24	6 50	12	10	6 4	6 30	25	9
4	Saturday..	5 19	5 39	25	8	7 13	7 34	13	1	6 53	7 14	26	2
5	Sunday ..	5 57	6 16	26	0	7 54	8 12	13	6	7 34	7 52	26	10
6	Monday..	6 35	6 54	26	1	8 31	8 50	13	8	8 11	8 30	27	0
7	Tuesday..	7 10	7 26	25	11	9 6	9 21	13	5	8 46	9 1	26	8
8	Wednesday	7 43	8 0	25	7	9 38	9 53	13	0	9 18	9 33	26	0
9	Thursday.	8 18	8 37	25	3	10 9	10 26	12	7	9 49	10 6	25	6
10	Friday ..	8 53	9 12	24	8	10 40	10 57	11	10	10 20	10 37	24	4
11	Saturday..	9 31	9 49	24	0	11 13	11 30	11	0	10 53	11 10	23	3
12	Sunday ..	10 9	10 29	23	5	11 49	..	10	4	11 29	11 50	22	2
13	Monday..	10 52	11 18	22	8	0 10	0 36	9	4	..	0 16	20	9
14	Tuesday..	11 47	..	22	6	1 5	1 37	9	2	0 45	1 17	20	6
15	Wednesday	0 20	0 55	22	8	2 12	2 44	9	4	1 52	2 24	20	9
16	Thursday.	1 30	2 7	23	8	3 16	3 53	10	7	2 56	3 33	22	7
17	Friday ..	2 42	3 15	25	2	4 30	5 6	12	6	4 10	4 46	25	4
18	Saturday..	3 47	4 17	26	7	5 40	6 11	14	3	5 20	5 51	28	0
19	Sunday ..	4 48	5 16	27	9	6 42	7 10	15	9	6 22	6 50	30	1
20	Monday..	5 43	6 9	28	1	7 38	8 6	16	2	7 18	7 46	30	8
21	Tuesday..	6 35	6 59	28	8	8 31	8 55	16	10	8 11	8 35	31	8
22	Wednesday	7 21	7 45	28	8	9 16	9 38	16	10	8 56	9 18	31	8
23	Thursday.	8 9	8 34	28	3	10 1	10 23	16	4	9 41	10 3	30	11
24	Friday ..	8 56	9 18	27	3	10 43	11 1	15	1	10 23	10 41	29	2
25	Saturday..	9 39	10 1	26	0	11 20	11 41	13	6	11 0	11 21	26	10
26	Sunday ..	10 23	10 44	24	8	..	0 3	11	10	11 43	..	24	4
27	Monday..	11 9	11 39	23	4	0 27	0 56	10	2	0 7	0 36	22	0
28	Tuesday..	..	0 11	22	5	1 28	2 3	9	1	1 8	1 43	20	4
29	Wednesday	0 48	1 28	22	3	2 38	3 14	8	10	2 18	2 54	20	0
30	Thursday.	2 7	2 44	22	11	3 53	4 31	9	8	3 33	4 11	21	3
31	Friday ..	3 15	3 44	23	9	5 6	5 37	10	9	4 46	5 17	22	9

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 4th, 8h. 39m. p.m. | New Moon .. 19th, 9h. 56m. p.m.
 Last Quarter. 13th, 0h. 40m. a.m. | First Quarter. 26th, 1h. 51m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.					Cardiff.					Gloucester.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	3	11	3	42	17	9	3	55	4	29	25	0	4	48	5	22	21	9
2	Thursday.	4	11	4	38	18	7	5	1	5	29	26	1	5	54	6	22	23	1
3	Friday ..	5	5	5	31	19	4	5	56	6	22	27	0	6	49	7	15	24	3
4	Saturday..	5	54	6	14	19	7	6	45	7	6	27	5	7	38	7	59	24	9
5	Sunday ..	6	32	6	51	20	0	7	26	7	44	28	0	8	19	8	37	25	5
6	Monday..	7	10	7	29	20	2	8	3	8	22	28	1	8	56	9	15	25	7
7	Tuesday..	7	45	8	1	19	11	8	38	8	53	27	10	9	31	9	46	25	3
8	Wednesday	8	18	8	35	19	6	9	10	9	25	27	3	10	3	10	17	24	7
9	Thursday	8	53	9	12	19	1	9	41	9	58	26	9	10	34	10	51	23	11
10	Friday ..	9	28	9	47	18	4	10	12	10	29	25	10	11	5	11	22	22	9
11	Saturday..	10	6	10	24	17	6	10	45	11	2	24	10	11	38	11	55	21	6
12	Sunday ..	10	44	11	4	16	10	11	21	11	41	23	11	..	0	14	20	5	..
13	Monday..	11	27	11	52	15	10	..	0	8	22	9	0	35	1	1	18	11	..
14	Tuesday..	..	0	22	15	8	0	37	1	9	22	6	1	30	2	2	18	7	..
15	Wednesday	0	55	1	30	15	10	1	44	2	16	22	9	2	37	3	9	18	11
16	Thursday.	2	5	2	42	17	1	2	48	3	25	24	3	3	41	4	18	20	10
17	Friday ..	3	17	3	50	19	0	4	2	4	38	26	7	4	55	5	31	23	9
18	Saturday..	4	22	4	52	20	9	5	12	5	43	28	11	6	5	6	36	26	7
19	Sunday ..	5	23	5	51	22	3	6	14	6	42	30	9	7	7	7	35	28	11
20	Monday..	6	18	6	44	22	8	7	10	7	38	31	3	8	3	8	31	29	7
21	Tuesday..	7	10	7	34	23	4	8	3	8	27	32	0	8	56	9	20	30	7
22	Wednesday	7	56	8	20	23	4	8	48	9	10	32	0	9	41	10	3	30	7
23	Thursday.	8	44	9	9	22	10	9	33	9	55	31	5	10	26	10	48	29	9
24	Friday ..	9	31	9	53	21	7	10	15	10	33	29	11	11	8	11	26	27	11
25	Saturday..	10	14	10	36	20	0	10	52	11	13	28	0	11	46	..	25	5	..
26	Sunday ..	10	58	11	19	18	4	11	35	11	59	25	10	0	6	0	28	22	9
27	Monday..	11	44	..	16	8	..	..	0	28	23	9	0	52	1	21	20	3	..
28	Tuesday..	0	14	0	46	15	7	1	0	1	35	22	4	1	53	2	28	18	5
29	Wednesday	1	23	2	3	15	4	2	10	2	46	22	1	3	3	3	39	18	2
30	Thursday.	2	42	3	19	16	2	3	25	4	3	23	2	4	18	4	56	19	5
31	Friday ..	3	50	4	19	17	3	4	38	5	9	24	5	5	31	6	2	21	0

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 4th, 8h. 39m. p.m. | New Moon .. 19th, 9h. 56m. p.m.
 Last Quarter. 13th, 0h. 40m. a.m. | First Quarter. 26th, 1h. 51m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.						Llanelly.						Milford Haven.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	2	46	3	17	17	8	3	21	3	52	18	2	3	21	3	52	17	8
2	Thursday	3	46	4	13	18	5	4	21	4	48	18	11	4	21	4	48	18	4
3	Friday ..	4	40	5	0	19	0	5	15	5	41	19	6	5	15	5	41	18	11
4	Saturday..	5	29	5	49	19	3	6	4	6	24	19	9	6	4	6	24	19	2
5	Sunday ..	6	7	6	26	19	8	6	42	7	1	20	2	6	42	7	1	19	6
6	Monday..	6	45	7	4	19	9	7	20	7	39	20	3	7	20	7	39	19	7
7	Tuesday ..	7	20	7	36	19	7	7	55	8	11	20	1	7	55	8	11	19	5
8	Wednesday	7	53	8	10	19	2	8	28	8	45	19	8	8	28	8	45	19	1
9	Thursday.	8	28	8	47	18	10	9	3	9	22	19	4	9	3	9	22	18	9
10	Friday ..	9	3	9	22	18	2	9	38	9	57	18	8	9	38	9	57	18	2
11	Saturday..	9	41	9	59	17	6	10	16	10	34	18	0	10	16	10	34	17	6
12	Sunday ..	10	19	10	39	16	10	10	54	11	14	17	4	10	54	11	14	16	11
13	Monday..	11	2	11	28	16	0	11	37	..	16	6	11	37	..	16	2	11	2
14	Tuesday ..	11	57	..	..	15	10	0	3	0	32	16	4	0	3	0	32	16	0
15	Wednesday	0	30	1	5	16	0	1	5	1	40	16	6	1	5	1	40	16	2
16	Thursday.	1	40	2	17	17	1	2	15	2	52	17	7	2	15	2	52	17	2
17	Friday ..	2	52	3	25	18	9	3	27	4	0	19	3	3	27	4	0	18	8
18	Saturday..	3	57	4	27	20	3	4	32	5	2	20	9	4	32	5	2	20	1
19	Sunday ..	4	58	5	26	21	7	5	33	6	1	22	1	5	33	6	1	21	3
20	Monday ..	5	53	6	19	21	11	6	28	6	54	22	5	6	28	6	54	21	7
21	Tuesday ..	6	45	7	9	22	7	7	20	7	44	23	1	7	20	7	44	22	7
22	Wednesday	7	31	7	55	22	7	8	6	8	30	23	1	8	6	8	30	22	7
23	Thursday.	8	19	8	44	22	1	8	54	9	19	22	7	8	54	9	19	21	8
24	Friday ..	9	6	9	28	21	0	9	41	10	3	21	6	9	41	10	3	20	9
25	Saturday..	9	49	10	11	19	8	10	24	10	46	20	2	10	24	10	46	19	6
26	Sunday ..	10	33	10	54	18	2	11	8	11	29	18	8	11	8	11	29	18	2
27	Monday..	11	19	11	49	16	9	11	54	..	17	3	11	54	..	16	10	11	2
28	Tuesday ..	..	0	0	21	15	9	0	24	0	56	16	3	0	24	0	56	15	11
29	Wednesday	0	58	1	38	15	7	1	33	2	13	16	1	1	33	2	13	15	9
30	Thursday.	2	17	2	54	16	3	2	52	3	29	16	9	2	52	3	29	16	3
31	Friday ..	3	25	3	54	17	3	4	0	4	29	17	9	4	0	4	29	17	3

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 4th, 8h. 39m. p.m. | New Moon .. 19th, 9h. 56m. p.m.
 Last Quarter. 13th, 0h. 40m. a.m. | First Quarter. 26th, 1h. 51m. p.m.

M. D.	W. D.	Newport.					Swansea.					Liverpool.				London.			
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.	
		H. M.	H. M.	H. M.	F. I.		H. M.	H. M.	H. M.	F. I.		H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	Wd	4 3	4 37	23	9		3 11	3 42	18	9		8 45	9 12	11 26	11 58				
2	Th	5 9	5 37	25	0		4 11	4 38	19	7		9 36	9 59	..	0 26				
3	Fri	6 4	6 30	26	1		5 5	5 31	20	4		10 22	10 43	0 51	1 15				
4	Sat	6 53	7 14	26	7		5 54	6 14	20	7		11 5	11 24	1 39	2 1				
5	Sun	7 34	7 52	27	8		6 32	6 51	21	0		11 43	..	2 21	2 40				
6	Mo	8 11	8 30	27	4		7 10	7 29	21	2		0 2	0 21	2 58	3 16				
7	Tu	8 46	9 1	27	1		7 45	8 1	20	11		0 40	0 57	3 35	3 53				
8	Wd	9 18	9 33	26	5		8 18	8 35	20	6		1 13	1 30	4 9	4 25				
9	Th	9 49	10 6	25	10		8 53	9 12	20	1		1 46	2 3	4 42	4 58				
10	Fri	10 20	10 37	24	9		9 28	9 47	19	4		2 22	2 39	5 16	5 35				
11	Sat	10 53	11 10	23	6		10 6	10 24	18	6		2 59	3 19	5 53	6 14				
12	Sun	11 29	11 50	22	7		10 44	11 4	17	10		3 39	4 8	6 35	6 56				
13	Mo	..	0 16	21	2		11 27	11 53	16	10		4 28	4 58	7 20	7 45				
14	Tu	0 45	1 17	20	11		..	0 22	16	8		5 30	6 6	8 14	8 47				
15	Wd	1 52	2 24	21	2		0 55	1 30	16	10		6 45	7 17	9 21	9 55				
16	Th	2 56	3 33	22	11		2 5	2 42	18	1		7 48	8 20	10 26	10 58				
17	Fri	4 10	4 46	25	8		3 17	3 50	20	0		8 51	9 19	11 32	..				
18	Sat	5 20	5 51	28	3		4 22	4 52	21	9		9 45	10 10	0 4	0 33				
19	Sun	6 22	6 50	30	4		5 23	5 51	23	3		10 36	11 2	1 0	1 27				
20	Mo	7 18	7 46	30	11		6 18	6 44	23	8		11 28	11 55	1 54	2 18				
21	Tu	8 11	8 35	31	10		7 10	7 34	24	4		..	0 21	2 44	3 10				
22	Wd	8 56	9 18	31	10		7 56	8 20	24	4		0 45	1 8	3 35	3 58				
23	Th	9 41	10 3	31	2		8 44	9 9	23	10		1 31	1 54	4 20	4 43				
24	Fri	10 23	10 41	29	5		9 31	9 53	22	7		2 19	2 42	5 7	5 32				
25	Sat	11 0	11 21	27	3		10 14	10 36	21	0		3 5	3 28	5 56	6 20				
26	Sun	11 43	..	24	9		10 58	11 19	19	4		3 53	4 19	6 44	7 10				
27	Mo	0 7	0 36	22	5		11 44	..	17	8		4 48	5 20	7 36	8 4				
28	Tu	1 8	1 43	20	9		0 14	0 46	16	7		5 56	6 35	8 36	9 12				
29	Wd	2 18	2 54	20	5		1 23	2 3	16	4		7 11	7 46	9 46	10 20				
30	Th	3 33	4 11	21	8		2 42	3 19	17	2		8 20	8 52	10 56	11 32				
31	Fri	4 46	5 17	23	1		3 50	4 19	18	3		9 19	9 43	..	0 5				

The above are in Greenwich Mean Time, if local time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 3rd, 11h. 51m. a.m. | New Moon .. 18th, 5h. 11m. a.m.
 Last Quarter . 11th, 0h. 28m. p.m. | First Quarter. 25th, 0h. 46m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn		Even.		Height	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Saturday.	4 12	4 37	24 8	24 8	6 6	6 31	11 10	11 10	5 46	6 11	24 4	24 4
2	Sunday ..	4 59	5 21	25 5	25 5	6 54	7 15	12 10	12 10	6 34	6 55	25 9	25 9
3	Monday..	5 41	5 59	25 9	25 9	7 36	7 56	13 3	13 3	7 16	7 36	26 4	26 4
4	Tuesday..	6 16	6 32	26 2	26 2	8 12	8 28	13 9	13 9	7 52	8 8	27 2	27 2
5	Wednesday	6 48	7 42	26 6	26 6	8 44	9 0	14 2	14 2	8 24	8 40	27 10	27 10
6	Thursday.	7 20	7 36	26 5	26 5	9 16	9 31	14 1	14 1	8 56	9 11	27 8	27 8
7	Friday ..	7 52	8 8	26 3	26 3	9 45	10 0	13 10	13 10	9 25	9 40	27 4	27 4
8	Saturday..	8 26	8 44	25 9	25 9	10 16	10 32	13 3	13 3	9 56	10 12	26 4	26 4
9	Sunday ..	9 0	9 17	25 1	25 1	10 46	11 1	12 5	12 5	10 26	10 41	25 2	25 2
10	Monday..	9 36	9 55	24 3	24 3	11 18	11 35	11 4	11 4	10 58	11 15	23 7	23 7
11	Tuesday..	10 18	10 39	23 4	23 4	11 58	..	10 2	10 2	11 38	..	22 0	22 0
12	Wednesday	11 5	11 35	22 5	22 5	0 21	0 51	9 1	9 1	0 1	0 31	20 4	20 4
13	Thursday.	..	0 12	22 5	22 5	1 24	2 4	9 1	9 1	1 4	1 44	20 4	20 4
14	Friday ..	0 56	1 39	23 1	23 1	2 45	3 25	9 11	9 11	2 25	3 5	21 7	21 7
15	Saturday..	2 18	2 54	24 8	24 8	4 4	4 42	11 10	11 10	3 44	4 22	24 4	24 4
16	Sunday ..	3 29	4 1	26 6	26 6	5 21	5 55	14 2	14 2	5 1	5 35	27 10	27 10
17	Monday..	4 32	5 1	27 11	27 11	6 26	6 55	15 11	15 11	6 6	6 35	30 5	30 5
18	Tuesday..	5 30	5 54	28 5	28 5	7 24	7 50	16 7	16 7	7 4	7 30	31 2	31 2
19	Wednesday	6 17	6 42	29 1	29 1	8 13	8 38	17 5	17 5	7 53	8 18	32 6	32 6
20	Thursday.	7 3	7 25	29 2	29 2	8 59	9 20	17 6	17 6	8 39	9 0	32 8	32 8
21	Friday ..	7 49	8 10	28 8	28 8	9 42	10 2	16 10	16 10	9 22	9 42	31 8	31 8
22	Saturday.	8 32	8 53	27 8	27 8	10 21	10 40	15 7	15 7	10 1	10 20	29 11	29 11
23	Sunday ..	9 12	9 33	26 3	26 3	10 57	11 14	13 10	13 10	10 37	10 54	27 4	27 4
24	Monday..	9 52	10 14	24 8	24 8	11 32	11 54	11 10	11 10	11 12	11 34	24 4	24 4
25	Tuesday..	10 36	11 1	23 0	23 0	..	0 18	9 9	9 9	11 58	..	21 5	21 5
26	Wednesday	11 31	..	21 9	21 9	0 47	1 20	8 2	8 2	0 27	1 0	19 0	19 0
27	Thursday.	0 9	0 51	21 5	21 5	2 1	2 41	7 9	7 9	1 41	2 21	18 6	18 6
28	Friday ..	1 35	2 17	21 11	21 11	3 22	4 4	8 5	8 5	3 2	3 44	19 4	19 4
29	Saturday..	2 51	3 22	23 0	23 0	4 40	5 14	9 9	9 9	4 20	4 54	21 5	21 5
30	Sunday ..	3 49	4 13	24 2	24 2	5 42	6 7	11 3	11 3	5 22	5 47	23 5	23 5
31	Monday..	4 37	4 57	25 3	25 3	6 31	6 51	12 7	12 7	6 11	6 31	25 6	25 6

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 3rd, 11h. 51m. a.m. | New Moon .. 18th, 5h. 11m. a.m.
 Last Quarter 11th, 0h. 28m. p.m. | First Quarter 26th, 0h. 46m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.						Cardiff.						Gloucester.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Saturday..	4	47	5	12	18	4	5	38	6	3	25	10	6	31	6	56	22	9
2	Sunday ..	5	34	5	56	19	4	6	26	6	47	27	0	7	19	7	40	24	3
3	Monday..	6	16	6	34	19	9	7	8	7	28	27	6	8	1	8	21	24	11
4	Tuesday..	6	51	7	7	20	3	7	44	8	0	28	3	8	37	8	53	25	9
5	Wednesday	7	23	7	39	20	8	8	16	8	32	28	9	9	9	9	25	26	5
6	Thursday.	7	55	8	11	20	7	8	48	9	3	28	7	9	41	9	56	26	3
7	Friday ..	8	27	8	43	20	4	9	17	9	32	28	4	10	10	10	25	25	11
8	Saturday .	9	1	9	19	19	9	9	48	10	4	27	6	10	41	10	57	24	11
9	Sunday ..	9	35	9	52	18	11	10	18	10	33	26	6	11	11	11	26	23	7
10	Monday..	10	11	10	30	17	10	10	50	11	7	25	2	11	44	12	0	21	11
11	Tuesday..	10	53	11	14	16	8	11	30	11	53	23	9	..	0	23	20	3	
12	Wednesday	11	40	..	15	7	..	..	0	23	22	4	0	46	1	16	18	5	
13	Thursday.	0	10	0	47	15	7	0	56	1	36	22	4	1	49	2	29	18	5
14	Friday ..	1	31	2	14	16	5	2	17	2	57	23	5	3	10	3	50	19	9
15	Saturday..	2	53	3	29	18	4	3	36	4	14	25	10	4	29	5	7	22	9
16	Sunday ..	4	4	4	36	20	8	4	53	5	27	28	9	5	46	6	20	26	5
17	Monday..	5	7	5	36	22	5	5	58	6	27	31	0	6	51	7	20	29	3
18	Tuesday..	6	5	6	29	23	1	6	56	7	22	31	8	7	49	8	15	30	1
19	Wednesday	6	52	7	17	23	11	7	45	8	10	32	9	8	38	9	3	31	5
20	Thursday.	7	38	8	0	24	0	8	31	8	52	32	11	9	24	9	45	31	7
21	Friday ..	8	24	8	45	23	5	9	14	9	34	32	0	10	7	10	27	30	7
22	Saturday..	9	7	9	28	22	1	9	53	10	12	30	7	10	46	11	5	28	9
23	Sunday ..	9	47	10	8	20	4	10	29	10	46	28	4	11	22	11	39	25	11
24	Monday..	10	27	10	49	18	4	11	4	11	26	25	10	11	57	..	22	9	
25	Tuesday..	11	11	11	36	16	3	11	50	..	23	3	0	19	0	43	19	7	
26	Wednesday	..	0	0	6	14	8	0	19	0	52	21	3	1	12	1	45	17	1
27	Thursday.	0	44	1	26	14	3	1	33	2	13	20	9	2	26	3	6	16	5
28	Friday ..	2	10	2	52	14	11	2	54	3	35	21	6	3	47	4	28	17	5
29	Saturday .	3	26	3	57	16	3	4	12	4	46	23	3	5	5	5	39	19	7
30	Sunday ..	4	24	4	48	17	9	5	14	5	39	25	0	6	7	6	32	21	9
31	Monday..	5	12	5	34	19	1	6	3	6	23	26	9	6	56	7	16	23	11

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10 m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 3rd, 11h. 51m. a.m. | New Moon .. 18th, 5h. 11m. a.m.
 Last Quarter .. 11th, 0h. 28m. p.m. | First Quarter, 25th, 0h. 46m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.	
1	Saturday ..	4 22	4 47	18 2		4 57	5 22	18 8		4 57	5 22	18 2	
2	Sunday ..	5 9	5 31	19 0		5 44	6 6	19 6		5 44	6 6	18 11	
3	Monday ..	5 51	6 9	19 5		6 26	6 44	19 11		6 26	6 44	19 3	
4	Tuesday ..	6 26	6 42	19 10		7 1	7 17	20 4		7 1	7 17	19 8	
5	Wednesday ..	6 58	7 14	20 2		7 33	7 49	20 8		7 33	7 49	20 0	
6	Thursday ..	7 30	7 46	20 1		8 5	8 21	20 7		8 5	8 21	19 11	
7	Friday ..	8 2	8 18	19 11		8 37	8 53	20 5		8 37	8 53	19 9	
8	Saturday ..	8 36	8 54	19 5		9 11	9 29	19 11		9 11	9 29	19 3	
9	Sunday ..	9 10	9 27	18 8		9 45	10 2	19 2		9 45	10 2	18 7	
10	Monday ..	9 46	10 5	17 9		10 21	10 40	18 3		10 21	10 40	17 9	
11	Tuesday ..	10 28	10 49	16 9		11 3	11 24	17 3		11 3	11 24	16 10	
12	Wednesday ..	11 15	11 45	15 9		11 50	..	16 3		11 50	..	15 11	
13	Thursday ..	..	0 22	15 9		0 20	0 57	16 3		0 20	0 57	15 11	
14	Friday ..	1 6	1 49	16 6		1 41	2 24	17 0		1 41	2 24	16 7	
15	Saturday ..	2 28	3 4	18 2		3 3	3 39	18 8		3 3	3 39	18 2	
16	Sunday ..	3 39	4 11	20 2		4 14	4 46	20 8		4 14	4 46	20 0	
17	Monday ..	4 42	5 11	21 9		5 17	5 46	22 3		5 17	5 46	21 5	
18	Tuesday ..	5 40	6 4	22 4		6 15	6 39	22 10		6 15	6 39	21 11	
19	Wednesday ..	6 27	6 52	23 0		7 2	7 27	23 6		7 2	7 27	22 7	
20	Thursday ..	7 13	7 35	23 1		7 48	8 10	23 7		7 48	8 10	22 8	
21	Friday ..	7 59	8 20	22 7		8 34	8 55	23 1		8 34	8 55	22 2	
22	Saturday ..	8 42	9 3	21 6		9 17	9 38	22 0		9 17	9 38	21 2	
23	Sunday ..	9 22	9 43	19 11		9 57	10 18	20 5		9 57	10 18	19 9	
24	Monday ..	10 2	10 24	18 2		10 37	10 59	18 8		10 37	10 59	18 2	
25	Tuesday ..	10 46	11 11	16 4		11 21	11 46	16 10		11 21	11 46	16 6	
26	Wednesday ..	11 41	..	15 0		..	0 16	15 6		..	0 16	15 3	
27	Thursday ..	0 19	1 1	14 7		0 54	1 36	15 1		0 54	1 36	14 11	
28	Friday ..	1 45	2 27	15 2		2 20	3 2	15 8		2 20	3 2	15 5	
29	Saturday ..	3 1	3 32	16 4		3 36	4 7	16 10		3 36	4 7	16 6	
30	Sunday ..	3 59	4 23	17 8		4 34	4 58	18 2		4 34	4 58	17 8	
31	Monday ..	4 47	5 7	18 10		5 22	5 42	19 4		5 22	5 42	18 9	

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 3rd, 11h. 51m. a.m. | New Moon .. 18th, 5h. 11m. a.m.
 Last Quarter 11th, 0h. 28m. p.m. | First Quarter 26th, 0h. 46m. p.m.

M. D.	W.	Newport.					Swansea.					Liverpool.		London.			
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.	Morn.		E. en.
		H. M.	H. M.	F. I.	F. I.		H. M.	H. M.	F. I.	F. I.		H. M.	H. M.		H. M.	H. M.	
1	Sat	5 46	6 11	24	9		4 47	5 12	19	4		10 6	10 27		0 33	0 58	
2	Sun	6 34	6 55	26	1		5 34	5 56	20	4		10 47	11 7		1 23	1 45	
3	Mo	7 16	7 36	26	9		6 16	6 34	20	9		11 26	11 45		2 4	2 23	
4	Tu	7 52	8 8	27	6		6 51	7 7	21	3		..	0 2		2 42	3 0	
5	Wd	8 24	8 40	28	1		7 23	7 39	21	8		0 18	0 34		3 16	3 32	
6	Th	8 56	9 11	27	11		7 55	8 11	21	7		0 51	1 7		3 47	4 3	
7	Fri	9 25	9 40	27	8		8 27	8 43	21	4		1 23	1 38		4 19	4 35	
8	Sat	9 56	10 12	26	9		9 1	9 19	20	9		1 53	2 11		4 50	5 6	
9	Sun	10 26	10 41	25	6		9 35	9 52	19	11		2 29	2 46		5 24	5 42	
10	Mo	10 58	11 15	23	11		10 11	10 30	18	10		3 4	3 25		6 0	6 19	
11	Tu	11 38	..	22	5		10 53	11 14	17	8		3 46	4 13		6 41	7 3	
12	Wd	0 1	0 31	20	9		11 40	..	16	7		4 40	5 15		7 30	7 57	
13	Th	1 4	1 44	20	9		0 10	0 47	16	7		5 51	6 36		8 31	9 8	
14	Fri	2 25	3 5	22	0		1 31	2 14	17	5		7 18	7 55		9 47	10 27	
15	Sat	3 44	4 22	24	9		2 53	3 29	19	4		8 29	9 1		11 6	11 42	
16	Sun	5 1	5 35	28	1		4 4	4 36	21	8		9 31	9 57		..	0 14	
17	Mo	6 6	6 35	30	8		5 7	5 36	23	5		10 23	10 48		0 45	1 13	
18	Tu	7 4	7 30	31	5		6 5	6 29	24	1		11 15	11 40		1 40	2 5	
19	Wd	7 53	8 18	32	8		6 52	7 17	24	11		..	0 3		2 31	2 55	
20	Th	8 39	9 0	32	10		7 38	8 0	25	0		0 28	0 50		3 17	3 41	
21	Fri	9 22	9 42	31	10		8 24	8 45	24	4		1 12	1 35		4 2	4 24	
22	Sat	10 1	10 20	30	2		9 7	9 28	23	1		1 55	2 17		4 47	5 8	
23	Sun	10 37	10 54	27	8		9 47	10 8	21	4		2 39	2 59		5 30	5 53	
24	Mo	11 12	11 34	24	9		10 27	10 49	19	4		3 21	3 42		6 14	6 37	
25	Tu	11 58	..	21	10		11 11	11 36	17	3		4 8	4 36		6 59	7 25	
26	Wd	0 27	1 0	19	5		..	0 6	15	8		5 10	5 47		7 53	8 26	
27	Th	1 41	2 21	18	10		0 44	1 26	15	3		6 33	7 14		9 4	9 44	
28	Fri	3 2	3 44	19	9		2 10	2 52	15	11		7 52	8 29		10 23	11 3	
29	Sat	4 20	4 54	21	10		3 26	3 57	17	3		8 59	9 25		11 41	..	
30	Sun	5 22	5 47	23	9		4 24	4 48	18	9		9 47	10 7		0 12	0 39	
31	Mo	6 11	6 31	25	10		5 12	5 32	20	1		10 27	10 44		1 2	1 24	

The above are in Greenwich Mean Time, if local time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 2nd, 3h. 57m. a.m. | New Moon .. 16th, 1h. 19m. p.m.
 Last Quarter. 9th, 10h. 4m. p.m. | First Quarter. 23rd, 3h. 21m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Tuesday..	5	16	5	35	25	9	7	10	7	30	13	3
2	Wednesday	5	50	6	5	26	5	7	46	8	2	14	1
3	Thursday..	6	22	6	38	26	11	8	18	8	34	14	8
4	Friday ..	6	54	7	8	27	1	8	50	9	4	14	11
5	Saturday..	7	25	7	40	27	0	9	20	9	35	14	9
6	Sunday ..	7	57	8	12	26	7	9	50	10	3	14	3
7	Monday..	8	30	8	49	25	10	10	19	10	36	13	4
8	Tuesday..	9	7	9	27	24	10	10	52	11	10	12	1
9	Wednesday	9	48	10	12	23	9	11	29	11	52	10	9
10	Thursday..	10	38	11	10	22	7	..	0	20	9	3	12
11	Friday ..	11	46	..	22	2	..	0	57	1	36	8	9
12	Saturday..	0	29	1	18	22	10	2	20	3	5	9	7
13	Sunday ..	2	3	2	41	24	6	3	48	4	29	11	8
14	Monday..	3	15	3	45	26	6	5	6	5	38	14	2
15	Tuesday..	4	16	4	43	28	1	6	9	6	37	16	2
16	Wednesday	5	10	5	34	28	7	7	4	7	28	16	9
17	Thursday..	5	56	6	20	29	4	7	52	8	16	17	8
18	Friday ..	6	43	7	3	29	5	8	39	8	59	17	10
19	Saturday..	7	23	7	43	28	10	9	18	9	38	17	1
20	Sunday ..	8	4	8	24	27	9	9	56	10	14	15	9
21	Monday..	8	43	9	0	26	3	10	31	10	47	13	10
22	Tuesday..	9	21	9	43	24	7	11	5	11	24	11	9
23	Wednesday	10	7	10	22	22	10	11	47	..	9	7	11
24	Thursday..	10	59	11	30	21	5	0	14	0	44	7	9
25	Friday ..	..	0	11	20	11	..	1	19	2	3	7	1
26	Saturday..	0	56	1	40	21	4	2	45	3	26	7	7
27	Sunday ..	2	17	2	48	22	6	4	3	4	36	9	2
28	Monday..	3	15	3	39	23	10	5	6	5	32	10	10
29	Tuesday..	4	2	4	23	25	1	5	56	6	18	12	5
30	Wednesday	4	43	5	2	26	2	6	37	6	56	13	9

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m — Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 2nd, 3h. 57m. a.m. | New Moon .. 16th, 1h. 19m. p.m.
 Last Quarter. 9th, 10h. 4m. p.m. | First Quarter. 23rd, 3h. 21m. p.m.

M D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Tuesday..	5	51	6	10	19	9	6	42	7	2	27	6
2	Wednesday	6	23	6	40	20	7	7	18	7	34	28	7
3	Thursday..	6	57	7	13	21	2	7	50	8	6	29	5
4	Friday ..	7	29	7	43	21	5	8	22	8	36	29	8
5	Saturday..	8	0	8	15	21	3	8	52	9	7	29	6
6	Sunday ..	8	32	8	47	20	9	9	22	9	35	28	11
7	Monday..	9	5	9	24	19	10	9	51	10	8	27	8
8	Tuesday..	9	42	10	2	18	7	10	24	10	42	26	1
9	Wednesday	10	23	10	47	17	3	11	1	11	24	24	5
10	Thursday	11	13	11	45	15	9	11	52	..	22	7	0
11	Friday ..	..	0	21	15	3	0	29	1	8	22	0	1
12	Saturday..	1	4	1	53	16	1	1	52	2	37	23	0
13	Sunday ..	2	38	3	16	18	2	3	20	4	1	25	6
14	Monday..	3	50	4	20	20	8	4	38	5	10	28	9
15	Tuesday..	4	51	5	18	22	8	5	41	6	9	31	3
16	Wednesday	5	45	6	9	23	3	6	36	7	0	31	11
17	Thursday..	6	31	6	55	24	2	7	24	7	48	33	2
18	Friday ..	7	18	7	38	24	4	8	11	8	31	33	3
19	Saturday..	7	58	8	18	23	7	8	50	9	10	32	4
20	Sunday ..	8	39	8	59	22	3	9	28	9	46	30	9
21	Monday..	9	18	9	35	20	4	10	3	10	19	28	4
22	Tuesday..	9	56	10	18	18	3	10	37	10	56	25	8
23	Wednesday	10	42	11	7	16	1	11	19	11	46	23	0
24	Thursday..	11	34	..	14	3	..	..	0	16	20	9	0
25	Friday ..	0	5	0	46	13	7	0	51	1	35	20	0
26	Saturday..	1	31	2	15	14	1	2	17	2	58	20	7
27	Sunday ..	2	52	3	23	15	8	3	35	4	8	22	6
28	Monday..	3	50	4	14	17	4	4	38	5	4	24	6
29	Tuesday..	4	37	4	58	18	11	5	28	5	50	26	6
30	Wednesday	5	18	5	37	20	3	6	9	6	28	28	3

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10 m.
 For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 2nd, 3h. 57m. a.m. | New Moon .. 16th, 1h. 19m. p.m.
 Last Quarter .. 9th, 10h. 4m. p.m. | First Quarter. 23rd, 3h. 21m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.	Even.	Height		Morn.	Even.	Height		Morn.	Even.	Height	
		H. M.	H. M.	F.	I.	H. M.	H. M.	F.	I.	H. M.	H. M.	F.	I.
1	Tuesday..	5 26	5 45	19	5	6 1	6 20	19	11	6 1	6 20	19	3
2	Wednesday	6 0	6 15	20	1	6 35	6 50	20	7	6 35	6 50	19	11
3	Thursday..	6 32	6 48	20	8	7 7	7 23	21	2	7 7	7 23	20	5
4	Friday ..	7 4	7 18	20	10	7 39	7 53	21	4	7 39	7 53	20	7
5	Saturday..	7 35	7 50	20	9	8 10	8 25	21	3	8 10	8 25	20	6
6	Sunday ..	8 7	8 22	20	3	8 42	8 57	20	9	8 42	8 57	20	1
7	Monday..	8 40	8 59	19	6	9 15	9 34	20	0	9 15	9 34	19	4
8	Tuesday ..	9 17	9 37	18	5	9 52	10 12	18	11	9 52	10 12	18	4
9	Wednesday	9 58	10 22	17	3	10 33	10 57	17	9	10 33	10 57	17	3
10	Thursday..	10 48	11 20	15	11	11 23	11 55	16	5	11 23	11 55	16	1
11	Friday ..	11 56	..	15	6	..	0 31	16	0	..	0 31	15	8
12	Saturday..	0 30	1 28	16	2	1 14	2 3	16	8	1 14	2 3	16	4
13	Sunday ..	2 13	2 51	18	0	2 48	3 26	18	6	2 48	3 26	18	0
14	Monday..	3 25	3 55	20	2	4 0	4 30	20	8	4 0	4 30	20	0
15	Tuesday ..	4 26	4 53	21	11	5 1	5 28	22	5	5 1	5 28	21	7
16	Wednesday	5 20	5 44	22	6	5 55	6 19	23	0	5 55	6 19	22	1
17	Thursday..	6 6	6 30	23	3	6 41	7 5	23	9	6 41	7 5	22	10
18	Friday ..	6 53	7 13	23	5	7 28	7 48	23	11	7 28	7 48	22	11
19	Saturday..	7 33	7 53	22	9	8 8	8 28	23	3	8 8	8 28	22	4
20	Sunday ..	8 14	8 34	21	7	8 49	9 9	22	1	8 49	9 9	21	3
21	Monday ..	8 53	9 10	19	11	9 28	9 45	20	5	9 28	9 45	19	9
22	Tuesday ..	9 31	9 53	18	1	10 6	10 28	18	7	10 6	10 28	18	1
23	Wednesday	10 17	10 42	16	2	10 52	11 17	16	8	10 52	11 17	16	4
24	Thursday..	11 9	11 40	14	7	11 44	..	15	1	11 44	..	14	11
25	Friday ..	..	0 21	14	0	0 15	0 56	14	6	0 15	0 56	14	5
26	Saturday..	1 6	1 50	14	6	1 41	2 25	15	0	1 41	2 25	14	10
27	Sunday ..	2 27	2 58	15	10	3 2	3 33	16	4	3 2	3 33	16	0
28	Monday..	3 25	3 49	17	4	4 0	4 24	17	10	4 0	4 24	17	4
29	Tuesday ..	4 12	4 33	18	8	4 47	5 8	19	2	4 47	5 8	18	7
30	Wednesday	4 53	5 12	19	10	5 28	5 47	20	4	5 28	5 47	19	8

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 2nd, 3h. 57m. a.m. | New Moon .. 16th, 1h. 19m. p.m.
 Last Quarter . 9th, 10h. 4m. p.m. | First Quarter. 23rd, 3h. 21m. p.m.

M. D.	W. D.	Newport.					Swansea.					Liverpool.				London.			
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.	
		H. M.	H. M.	F. I.	F. I.		H. M.	H. M.	F. I.	F. I.		H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	Tu	6 50	7 10	26	9		5 51	6 10	20	9		11 2	11 20	1 45	2 2				
2	Wd	7 26	7 42	27	11		6 25	6 40	21	7		11 35	11 51	2 18	2 36				
3	Th	7 58	8 14	28	9		6 57	7 13	22	2		..	0 8	2 51	3 6				
4	Fri	8 30	8 44	29	1		7 29	7 43	22	5		0 24	0 40	3 22	3 37				
5	Sat	9 0	9 15	28	11		8 0	8 15	22	3		0 55	1 12	3 53	4 7				
6	Sun	9 30	9 43	28	3		8 32	8 47	21	9		1 27	1 43	4 24	4 39				
7	Mo	9 59	10 16	26	11		9 5	9 24	20	10		1 57	2 15	4 55	5 10				
8	Tu	10 32	10 50	25	0		9 42	10 2	19	7		2 34	2 53	5 28	5 48				
9	Wd	11 9	11 32	23	1		10 23	10 47	18	3		3 15	3 38	6 8	6 31				
10	Th	12 0	..	21	0		11 13	11 45	16	9		4 6	4 39	6 55	7 23				
11	Fri	0 37	1 16	20	3		..	0 21	16	3		5 21	6 5	7 56	8 37				
12	Sat	2 0	2 45	21	6		1 4	1 53	17	1		6 53	7 37	9 20	10 3				
13	Sun	3 28	4 9	24	4		2 38	3 16	19	2		8 16	8 50	10 47	11 28				
14	Mo	4 46	5 18	28	1		3 50	4 20	21	8		9 19	9 44	..	0 3				
15	Tu	5 49	6 17	30	11		4 51	5 18	23	8		10 9	10 32	0 33	0 59				
16	Wd	6 44	7 8	31	8		5 45	6 9	24	3		10 56	11 19	1 26	1 50				
17	Th	7 32	7 56	33	2		6 31	6 55	25	2		11 42	..	2 13	2 35				
18	Fri	8 19	8 39	33	4		7 18	7 38	25	4		0 6	0 29	2 57	3 20				
19	Sat	8 58	9 18	32	2		7 58	8 18	24	7		0 50	1 10	3 42	4 2				
20	Sun	9 36	9 51	30	4		8 39	8 59	23	3		1 30	1 50	4 22	4 42				
21	Mo	10 11	10 27	27	8		9 18	9 35	21	4		2 9	2 28	5 2	5 22				
22	Tu	10 45	11 4	24	6		9 56	10 18	19	3		2 46	3 8	5 41	6 1				
23	Wd	11 27	11 54	21	6		10 42	11 7	17	1		3 33	4 0	6 24	6 49				
24	Th	..	0 24	18	10		11 34	..	15	3		4 32	5 7	7 17	7 49				
25	Fri	0 59	1 43	18	0		0 5	0 46	14	7		5 46	6 35	8 23	9 3				
26	Sat	2 25	3 6	18	8		1 31	2 15	15	1		7 18	7 56	9 46	10 27				
27	Sun	3 43	4 16	20	11		2 52	3 23	16	8		8 29	8 56	11 7	11 41				
28	Mo	4 46	5 12	23	2		3 50	4 14	18	4		9 19	9 39	..	0 9				
29	Tu	5 36	5 58	25	6		4 37	4 58	19	11		9 58	10 16	0 33	0 54				
30	Wd	6 17	6 36	27	6		5 18	5 37	21	3		10 32	10 49	1 14	1 33				

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 16m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 1st, 7h. 58m. p.m. | First Quarter. 23rd, 9h. 42m. a.m.
 Last Quarter. 9th, 6h. 13m. a.m. | Full Moon .. 31st, 1h. 5m. a.m.
 New Moon .. 15th, 11h. 1m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	P.	I.	H.	M.	H.	M.	P.	I.
1	Thursday.	5	19	5	37	26	7	7	13	7	32	14	3
2	Friday ..	5	53	6	9	27	3	7	49	8	6	15	1
3	Saturday.	6	24	6	40	27	6	8	20	8	36	15	5
4	Sunday ..	6	58	7	14	27	5	8	54	9	10	15	3
5	Monday..	7	30	7	50	27	0	9	25	9	43	14	9
6	Tuesday..	8	8	8	27	26	3	10	0	10	17	13	10
7	Wednesday	8	48	9	9	25	2	10	36	10	54	12	6
8	Thursday.	9	33	9	58	24	1	11	14	11	38	11	2
9	Friday ..	10	24	10	54	22	9	..	0	4	9	6	11
10	Saturday..	11	30	..	..	22	4	0	39	1	19	8	11
11	Sunday ..	0	14	1	3	22	11	2	6	2	51	9	8
12	Monday..	1	46	2	21	24	7	3	32	4	10	11	9
13	Tuesday..	2	55	3	25	26	5	4	44	5	17	14	1
14	Wednesday	3	55	4	19	27	11	5	48	6	13	15	11
15	Thursday.	4	46	5	11	28	9	6	39	7	5	17	0
16	Friday ..	5	34	5	55	28	11	7	28	7	51	17	2
17	Saturday.	6	18	6	36	28	11	8	14	8	32	17	2
18	Sunday ..	6	57	7	17	28	5	8	53	9	13	16	7
19	Monday..	7	35	7	55	27	4	9	30	9	48	15	2
20	Tuesday..	8	11	8	35	26	0	10	5	10	24	13	6
21	Wednesday	8	51	9	15	24	6	10	41	10	59	11	8
22	Thursday	9	36	9	58	23	0	11	18	11	38	9	9
23	Friday ..	10	24	10	54	21	8	..	0	4	8	0	11
24	Saturday.	11	26	..	..	21	1	0	39	1	15	7	4
25	Sunday ..	0	5	0	46	21	3	1	56	2	36	7	6
26	Monday..	1	25	2	4	22	2	3	12	3	49	8	9
27	Tuesday.	2	35	3	2	23	6	4	21	4	51	10	5
28	Wednesday	3	22	3	44	24	9	5	14	5	37	12	0
29	Thursday	4	6	4	23	25	11	5	59	6	18	13	5
30	Friday ..	4	43	5	3	26	9	6	37	6	57	14	6
31	Saturday..	5	22	5	39	27	1	7	17	7	34	14	11

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 1st, 7h. 58m. p.m. | First Quarter. 23rd, 9h. 42m. a.m.
 Last Quarter. 9th, 6h. 13m. a.m. | Full Moon .. 31st, 11h. 5m. a.m.
 New Moon .. 15th, 11h. 1m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn		Even.		Height		Morn.		Even		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday.	5	54	6	12	20	9	6	45	7	4	28	11
2	Friday ..	6	28	6	44	21	7	7	21	7	38	29	11
3	Saturday..	6	59	7	15	21	11	7	52	8	8	30	4
4	Sunday ..	7	33	7	49	21	10	8	26	8	42	30	2
5	Monday..	8	5	8	25	21	3	8	57	9	15	29	6
6	Tuesday..	8	43	9	2	20	4	9	32	9	49	28	4
7	Wednesdy	9	23	9	41	19	0	10	8	10	26	26	7
8	Thursday.	10	8	10	33	17	8	10	46	11	10	24	11
9	Friday ..	10	59	11	29	16	0	11	36	..	..	22	10
10	Saturday .	..	0	5	15	5	5	0	11	0	51	22	3
11	Sunday ..	0	49	1	38	16	2	1	38	2	23	23	2
12	Monday..	2	21	2	59	18	3	3	4	3	42	25	8
13	Tuesday..	3	30	4	0	20	7	4	16	4	49	28	7
14	Wednesdy	4	30	4	54	22	5	5	20	5	45	31	0
15	Thursday	5	21	5	46	23	4	6	11	6	37	32	2
16	Friday ..	6	9	6	30	23	8	7	0	7	23	32	6
17	Saturday..	6	53	7	11	23	8	7	46	8	4	32	6
18	Sunday ..	7	32	7	52	23	1	8	25	8	45	31	8
19	Monday..	8	10	8	30	21	8	9	2	9	20	30	0
20	Tuesday..	8	49	9	10	20	0	9	37	9	56	28	0
21	Wednesdy	9	29	9	50	18	2	10	13	10	31	25	6
22	Thursday	10	11	10	33	16	3	10	50	11	10	23	3
23	Friday ..	10	59	11	29	14	6	11	36	..	..	21	1
24	Saturday..	..	0	1	13	10	10	0	11	0	47	20	3
25	Sunday ..	0	40	1	21	14	0	1	28	2	8	20	6
26	Monday..	2	0	2	39	15	3	2	44	3	21	22	0
27	Tuesday..	3	10	3	37	16	11	3	53	4	23	24	0
28	Wednesdy	3	57	4	19	18	6	4	46	5	9	26	0
29	Thursday.	4	41	4	58	19	11	5	31	5	50	27	10
30	Friday ..	5	18	5	38	21	0	6	9	6	29	29	1
31	Saturday .	5	57	6	14	21	5	6	49	7	6	29	8

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 1st, 7h. 58m. p.m. | First Quarter. 23rd, 9h. 42m. a.m.
 Last Quarter. 9th, 6h. 13m. a.m. | Full Moon .. 31st, 11h. 5m. a.m.
 New Moon .. 15th, 11h. 1m. p.m.

M D.	WEEK DAYS.	Ilfracombe.					Llanelly.					Milford Haven.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday..	5	29	5	47	20	3	6	4	6	22	20	9	6	4	6	22	20	1
2	Friday ..	6	3	6	19	21	0	6	38	6	54	21	6	6	38	6	54	20	9
3	Saturday ..	6	34	6	50	21	4	7	9	7	25	21	10	7	9	7	25	21	0
4	Sunday ..	7	8	7	24	21	3	7	43	7	59	21	9	7	43	7	59	20	11
5	Monday..	7	40	8	1	20	9	8	15	8	35	21	3	8	15	8	35	20	6
6	Tuesday..	8	18	8	37	19	11	8	53	9	12	20	5	8	53	9	12	19	9
7	Wednesday	8	58	9	19	18	9	9	33	9	54	19	3	9	33	9	54	18	8
8	Thursday	9	43	10	8	17	7	10	18	10	43	18	1	10	18	10	43	17	7
9	Friday ..	10	34	11	4	16	1	11	9	11	39	16	7	11	9	11	39	16	3
10	Saturday..	11	40	..	15	8	..	..	0	15	16	2	..	..	0	15	15	10	..
11	Sunday ..	0	24	1	13	16	3	0	59	1	48	16	9	0	59	1	48	16	5
12	Monday..	1	56	2	34	18	1	2	31	3	9	18	7	2	31	3	9	18	1
13	Tuesday..	3	5	3	35	20	1	3	40	4	10	20	7	3	40	4	10	19	11
14	Wednesday	4	5	4	29	21	9	4	40	5	4	22	3	4	40	5	4	21	5
15	Thursday..	4	56	5	21	22	8	5	31	5	56	23	2	5	31	5	56	22	3
16	Friday ..	5	44	6	5	22	10	6	19	6	40	23	4	6	19	6	40	22	5
17	Saturday..	6	28	6	46	22	10	7	3	7	21	23	4	7	3	7	21	22	5
18	Sunday ..	7	7	7	27	22	4	7	42	8	2	22	10	7	42	8	2	21	11
19	Monday..	7	45	8	5	21	1	8	20	8	40	21	7	8	20	8	40	20	10
20	Tuesday..	8	24	8	45	19	8	8	59	9	20	20	2	8	59	9	20	19	6
21	Wednesday	9	4	9	25	18	0	9	39	10	0	18	6	9	39	10	0	18	0
22	Thursday..	9	46	10	8	16	4	10	21	10	43	16	10	10	21	10	43	16	5
23	Friday ..	10	34	11	4	14	10	11	9	11	39	15	4	11	9	11	39	15	2
24	Saturday ..	11	36	..	14	3	..	..	0	11	14	9	..	..	0	11	14	..	..
25	Sunday ..	0	15	0	56	14	5	0	50	1	31	14	11	0	50	1	31	14	0
26	Monday..	1	35	2	14	15	6	2	10	2	49	16	0	2	10	2	49	15	5
27	Tuesday..	2	45	3	1	16	11	3	20	3	47	17	5	3	20	3	47	17	0
28	Wednesday	3	32	3	54	18	4	4	7	4	29	18	10	4	7	4	29	18	1
29	Thursday..	4	16	4	33	19	7	4	51	5	8	20	1	4	51	5	8	19	2
30	Friday ..	4	53	5	12	20	6	5	28	5	48	21	0	5	28	5	48	20	3
31	Saturday..	5	32	5	49	20	10	6	7	6	24	21	4	6	7	6	24	20	4

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 1st, 7h. 58m. p.m. | First Quarter. 23rd, 9h. 42m. a.m.
 Last Quarter. 9th, 6h. 13m. a.m. | Full Moon .. 31st, 11h. 5m. a.m.
 New Moon .. 15th, 11h. 1m. p.m.

M.	W.	Newport.				Swansea.				Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.	
D.	D.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.
1	Th	6	53	7	12	28	3	5	54	6	12	21	9	11	5	11	22
2	Fri	7	29	7	46	29	5	6	28	6	44	22	7	11	39	11	55
3	Sat	8	0	8	16	29	11	6	59	7	15	22	11	..	0	10	..
4	Sun	8	34	8	50	29	9	7	33	7	49	22	10	0	26	0	44
5	Mo	9	5	9	23	28	11	8	5	8	25	22	3	1	1	1	17
6	Tu	9	40	9	57	27	8	8	43	9	2	21	4	1	36	1	53
7	Wd	10	16	10	34	25	8	9	23	9	44	20	0	2	12	2	34
8	Th	10	54	11	18	23	8	10	8	10	33	18	8	2	55	3	21
9	Fri	11	44	..	..	21	4	10	59	11	29	17	6	3	49	4	21
10	Sat	0	19	0	59	20	7	..	..	0	5	16	5	5	1	5	46
11	Sun	1	46	2	31	21	8	0	49	1	38	17	2	6	39	7	24
12	Mo	3	12	3	50	24	6	2	21	2	59	19	3	8	2	8	34
13	Tu	4	24	4	57	27	11	3	30	4	0	21	7	9	2	9	28
14	Wd	5	28	5	53	30	8	4	30	4	54	23	5	9	52	10	12
15	Th	6	19	6	45	32	6	5	21	5	40	24	6	10	34	10	58
16	Fri	7	8	7	31	32	4	6	9	6	30	24	8	11	19	11	41
17	Sat	7	54	8	12	32	4	6	53	7	11	24	8	..	0	4	..
18	Sun	8	33	8	53	31	5	7	32	7	52	24	1	0	22	0	43
19	Mo	9	10	9	28	29	7	8	10	8	30	22	8	1	4	1	22
20	Tu	9	45	10	4	27	3	8	49	9	10	21	0	1	41	1	59
21	Wd	10	21	10	39	24	4	9	29	9	50	19	2	2	20	2	40
22	Th	10	58	11	18	21	10	10	11	10	33	17	3	3	2	3	25
23	Fri	11	44	..	..	19	3	10	59	11	29	15	6	3	49	4	21
24	Sat	0	19	0	55	18	3	..	..	0	1	14	10	5	1	5	41
25	Sun	1	36	2	16	18	7	0	40	1	21	15	0	6	27	7	9
26	Mo	2	52	3	29	20	3	2	0	2	39	16	3	7	44	8	17
27	Tu	4	1	4	31	22	8	3	10	3	37	17	11	8	44	9	7
28	Wd	4	51	5	17	24	11	3	57	4	19	19	6	9	25	9	43
29	Th	5	39	5	58	27	1	4	41	4	58	20	11	10	1	10	16
30	Fri	6	17	6	37	28	5	5	18	5	38	22	0	10	32	10	50
31	Sat	6	57	7	14	29	1	5	57	6	14	22	5	11	8	11	24

The above are in Greenwich Mean Time, if local time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

H

PHASES OF THE MOON.

Last Quarter. 7th, 1h. 46m. p.m. | First Quarter. 22nd, 6h. 46m. a.m.
 New Moon .. 14th, 10h. 55m. a.m. | Full Moon .. 30th, 1h. 0m. a.m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgewater.					Bristol.							
		Morn		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Sunday ..	5	56	6	13	27	6	7	52	8	10	15	5	7	32	7	50	29	8
2	Monday..	6	32	6	52	27	7	8	28	8	48	15	6	8	8	8	28	29	10
3	Tuesday..	7	9	7	29	27	3	9	5	9	24	15	1	8	45	9	4	29	2
4	Wednesday	7	50	8	12	26	7	9	43	10	3	14	3	9	23	9	43	28	0
5	Thursday..	8	34	8	58	25	7	10	23	10	46	13	0	10	3	10	26	26	0
6	Friday ..	9	21	9	48	24	6	11	5	11	29	11	8	10	43	11	9	24	0
7	Saturday..	10	16	10	47	23	5	11	56	..	10	4	11	36	..	22	2	2	
8	Sunday ..	11	22	12	0	22	11	0	31	1	10	9	7	0	11	0	50	21	1
9	Monday..	..	0	43	23	3	1	1	51	2	33	10	1	1	31	2	13	21	10
10	Tuesday ..	1	24	2	4	24	6	3	11	3	49	11	8	2	51	3	29	24	0
11	Wednesday	2	35	3	4	26	6	4	21	4	54	13	6	4	1	4	34	26	10
12	Thursday..	3	34	4	0	27	2	5	20	5	53	15	0	5	6	5	33	29	0
13	Friday ..	4	23	4	49	27	9	6	18	6	43	15	9	5	58	6	23	30	1
14	Saturday..	5	13	5	34	27	10	7	8	7	28	15	10	6	48	7	8	30	3
15	Sunday ..	5	54	6	16	27	11	7	50	8	12	15	11	7	30	7	52	30	5
16	Monday..	6	34	6	54	27	6	8	30	8	5	15	5	8	10	8	30	29	8
17	Tuesday ..	7	12	7	31	26	8	9	8	9	26	14	4	8	48	9	6	28	1
18	Wednesday	7	51	8	10	25	9	9	44	10	2	13	3	9	24	9	42	26	4
19	Thursday..	8	30	8	50	24	7	10	19	10	37	11	9	9	59	10	17	24	2
20	Friday ..	9	9	9	30	23	6	10	55	11	12	10	5	10	8	10	52	22	3
21	Saturday..	9	51	10	16	22	5	11	31	11	56	9	1	11	11	11	36	20	4
22	Sunday ..	10	43	11	12	21	8	..	0	26	8	0	..	..	0	6	18	10	
23	Monday ..	11	43	..	21	6	0	0	59	1	33	7	10	0	39	1	13	18	7
24	Tuesday ..	0	16	0	54	11	11	2	8	2	43	8	5	1	48	2	23	19	4
25	Wednesday	1	29	2	0	22	11	3	15	3	45	9	8	2	55	3	23	21	3
26	Thursday..	2	29	2	57	24	1	4	16	4	40	11	2	3	56	4	26	23	4
27	Friday ..	3	21	3	43	25	3	5	12	5	36	12	7	4	52	5	16	25	6
28	Saturday..	4	6	4	28	26	3	5	59	6	22	13	10	5	39	6	2	27	4
29	Sunday ..	4	51	5	15	27	0	6	45	7	9	14	9	6	25	6	49	28	8
30	Monday..	5	35	5	53	27	3	7	30	7	49	15	1	7	10	7	29	29	2

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m — Bridgewater, *sub.* 12m. — Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter 7th, 1h. 46m. p.m. | First Quarter 22nd, 6h. 46m. a.m.
 New Moon .. 14th, 10h. 55m. a.m. | Full Moon .. 30th, 1h. 0m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Sunday ..	6 31	6 48	21 11	11	7 24	7 42	30 4	4	8 17	8 35	28 5	5
2	Monday...	7 7	7 27	22 0	0	8 0	8 20	30 6	6	8 53	9 13	28 7	7
3	Tuesday..	7 44	8 4	21 7	7	8 37	8 56	29 11	11	9 30	9 49	27 11	11
4	Wednesday	8 25	8 47	20 9	9	9 15	9 35	28 11	11	10 8	10 28	26 7	7
5	Thursday	9 9	9 33	19 6	6	9 55	10 18	27 3	3	10 48	11 11	24 7	7
6	Friday ..	9 56	10 23	18 2	2	10 37	11 1	25 6	6	11 30	11 54	22 5	5
7	Saturday..	10 51	11 22	16 10	10	11 28	..	23 11	11	..	0 21	20 5	5
8	Sunday ..	11 57	..	16 1	1	0 3	0 42	23 0	0	0 56	1 35	19 3	3
9	Monday..	0 35	1 18	16 7	7	1 23	2 5	23 8	8	2 16	2 58	20 1	1
10	Tuesday..	1 59	2 39	18 2	2	2 43	3 21	25 6	6	3 36	4 14	22 5	5
11	Wednesday	3 10	3 39	20 0	0	3 53	4 26	28 0	0	4 46	5 19	25 5	5
12	Thursday..	4 9	4 35	21 6	6	4 56	5 25	29 9	9	5 51	6 18	27 9	9
13	Friday ..	4 58	5 24	22 3	3	5 50	6 15	30 9	9	6 43	7 8	28 11	11
14	Saturday..	5 48	6 9	22 4	4	6 40	7 0	30 10	10	7 33	7 53	29 1	1
15	Sunday ..	6 29	6 51	22 5	5	7 22	7 44	31 0	0	8 15	8 37	29 3	3
16	Monday..	7 9	7 29	21 11	11	8 2	8 22	30 4	4	8 55	9 15	28 5	5
17	Tuesday..	7 47	8 6	20 10	10	8 40	8 58	29 0	0	9 33	9 51	26 9	9
18	Wednesday	8 26	8 45	19 9	9	9 16	9 34	27 6	6	10 9	10 27	24 11	11
19	Thursday..	9 5	9 25	18 3	3	9 51	10 9	25 8	8	10 45	11 2	22 7	7
20	Friday ..	9 44	10 5	16 11	11	10 27	10 44	24 0	0	11 20	11 37	20 6	6
21	Saturday..	10 26	10 51	15 7	7	11 3	11 28	22 4	4	11 56	..	18 5	5
22	Sunday ..	11 18	11 47	14 6	6	11 58	..	21 1	1	0 21	0 51	16 11	11
23	Monday..	..	0 18	14 4	4	0 31	1 5	20 10	10	1 24	1 58	16 7	7
24	Tuesday..	0 51	1 29	14 11	11	1 40	2 15	21 6	6	2 33	3 8	17 5	5
25	Wednesday	2 4	2 35	16 2	2	2 47	3 17	23 2	2	3 40	4 10	19 5	5
26	Thursday..	3 4	3 32	17 8	8	3 48	4 18	24 11	11	4 41	5 11	21 7	7
27	Friday ..	3 56	4 18	19 1	1	4 44	5 8	26 9	9	5 37	6 1	23 11	11
28	Saturday..	4 41	5 3	20 4	4	5 31	5 54	28 4	4	6 24	6 47	25 11	11
29	Sunday ..	5 26	5 50	21 3	3	6 17	6 41	29 6	6	7 10	7 34	27 5	5
30	Monday..	6 10	6 28	21 7	7	7 2	7 21	29 11	11	7 55	8 14	27 11	11

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter.. 7th, 1h. 46m. p.m. | First Quarter, 22nd, 6h. 46m. a.m.
 New Moon .. 14th, 10h. 55m. a.m. | Full Moon .. 30th, 1h. 0m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.					Llanelly.					Milford Haven.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H. M.	H. M.	H. M.	H. M.	F. I	H. M.	H. M.	H. M.	H. M.	F. I	H. M.	H. M.	H. M.	H. M.	F. I
1	Sunday ..	6 6	6 23	21	4		6 41	6 58	21	10		6 41	6 58	21	0	
2	Monday ..	6 42	7 2	21	5		7 17	7 37	21	11		7 17	7 37	21	1	
3	Tuesday ..	7 19	7 39	21	0		7 54	8 14	21	6		7 54	8 14	20	9	
4	Wednesday ..	7 59	8 22	20	3		8 35	8 57	20	9		8 35	8 57	20	1	
5	Thursday ..	8 41	9 8	19	2		9 19	9 43	19	8		9 19	9 43	19	1	
6	Friday ..	9 31	9 58	18	0		10 6	10 33	18	6		10 6	10 33	18	0	
7	Saturday ..	10 26	10 57	16	10		11 1	11 32	17	4		11 1	11 32	16	11	
8	Sunday ..	11 32	..	16	2		..	0 7	16	8		..	0 7	16	4	
9	Monday ..	0 10	0 53	16	8		0 45	1 2	17	2		0 45	1 2	16	9	
10	Tuesday ..	1 34	2 14	18	0		2 9	2 49	18	6		2 9	2 49	18	0	
11	Wednesday ..	2 45	3 14	19	8		3 21	3 49	20	2		3 20	3 49	19	6	
12	Thursday ..	3 44	4 10	20	11		4 19	4 45	21	5		4 19	4 45	20	8	
13	Friday ..	4 33	4 59	21	7		5 8	5 31	22	1		5 8	5 34	21	3	
14	Saturday ..	5 23	5 44	21	8		5 58	6 19	22	2		5 58	6 19	21	4	
15	Sunday ..	6 4	6 26	21	9		6 39	7 1	22	3		6 39	7 1	21	5	
16	Monday ..	6 41	7 4	21	4		7 19	7 39	21	10		7 19	7 39	21	0	
17	Tuesday ..	7 22	7 41	0	4		7 57	8 16	20	10		7 57	8 16	20	2	
18	Wednesday ..	8 1	8 20	19	5		8 36	8 55	19	11		8 36	8 55	19	2	
19	Thursday ..	8 4	9 0	18	1		9 15	9 35	18	7		9 15	9 35	18	1	
20	Friday ..	9 19	9 40	16	11		9 54	10 15	17	5		9 54	10 15	17	0	
21	Saturday ..	10 1	10 26	15	9		10 36	11 1	16	3		10 36	11 1	15	11	
22	Sunday ..	10 52	11 22	14	10		11 28	11 57	15	4		11 28	11 57	15	2	
23	Monday ..	11 54	..	14	8		..	0 28	15	2		..	0 28	15	0	
24	Tuesday ..	0 26	1 4	15	2		1 1	1 39	15	8		1 1	1 39	15	5	
25	Wednesday ..	1 39	2 10	16	3		2 14	2 45	16	9		2 14	2 45	16	5	
26	Thursday ..	2 39	3 7	17	7		3 14	3 42	18	1		3 14	3 42	17	7	
27	Friday ..	3 31	3 53	18	10		4 6	4 28	19	4		4 6	4 28	18	9	
28	Saturday ..	4 16	4 38	19	11		4 51	5 13	20	5		4 51	5 13	19	9	
29	Sunday ..	5 1	5 25	20	9		5 36	6 0	21	3		5 36	6 0	20	6	
30	Monday ..	5 45	6 3	21	0		6 20	6 38	21	6		6 20	6 38	20	9	

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub* 16m.—Llanelly, *sub* 16m.—Milford Haven, *sub* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 7th, 1h. 46m. p.m. | First Quarter. 22nd, 6h. 46m. a.m.
 New Moon .. 14th, 10h. 55m. a.m. | Full Moon .. 30th, 1h. 0m. a.m.

M D.	W. D.	Newport.				Swansea.				Liverpool.				London.			
		Morn		Even.		Morn		Even		Morn.		Even		Morn.		Even	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Sun	7 32	7 50	29 11	6 31	6 48	22 11	11 42	11 59	2 24	2 40	2 57	3 14	2 24	2 40	2 57	3 14
2	Mo	8 8	8 28	30 1	7 7	7 27	23 0	..	0 18	2 57	3 14	3 32	3 51	2 57	3 14	3 32	3 51
3	Tu	8 45	9 4	9 5	7 44	8 4	22 7	0 38	0 56	3 32	3 51	4 8	4 28	3 32	3 51	4 8	4 28
4	Wd	9 23	9 43	28 3	8 25	8 47	21 9	1 16	1 34	4 8	4 28	4 48	5 10	4 8	4 28	4 48	5 10
5	Th	10 3	10 26	26 5	9 1	9 35	20 6	1 57	2 19	4 48	5 10	5 32	5 58	4 48	5 10	5 32	5 58
6	Fri	10 45	11 9	24 4	9 56	10 23	19 2	2 44	3 8	5 32	5 58	6 24	6 55	5 32	5 58	6 24	6 55
7	Sat	11 36	..	22 7	10 51	11 22	17 10	3 38	4 1	6 24	6 55	7 28	8 8	6 24	6 55	7 28	8 8
8	Sun	0 11	0 50	21 6	11 57	..	17 1	4 52	5 35	7 28	8 8	8 52	9 34	7 28	8 8	8 52	9 34
9	Mo	1 31	2 13	22 3	0 35	1 18	17 7	6 21	7 5	8 52	9 34	10 15	10 55	8 52	9 34	10 15	10 55
10	Tu	2 51	3 29	24 4	1 59	2 39	19 2	7 45	8 17	10 15	10 55	11 29	11 57	10 15	10 55	11 29	11 57
11	Wd	4 1	4 34	27 3	3 16	3 39	21 0	8 44	9 9	11 29	11 57	..	0 23	11 29	11 57	..	0 23
12	Th	5 6	5 35	29 3	4 1	4 35	22 6	9 31	9 56	..	0 23	0 49	1 12	..	0 23	0 49	1 12
13	Fri	5 58	6 23	30 4	4 58	5 24	23 8	10 16	0 37	0 49	1 12	1 33	1 55	0 49	1 12	1 33	1 55
14	Sat	6 48	7 8	30 6	5 48	6 9	23 4	11 6	11 15	1 33	1 55	2 16	2 35	1 33	1 55	2 16	2 35
15	Sun	7 30	7 52	30 8	6 29	6 51	23 5	11 46	..	2 16	2 35	2 55	3 16	2 16	2 35	2 55	3 16
16	Mo	8 16	8 30	29 11	7 9	7 29	22 11	0 2	0 26	2 55	3 16	3 31	3 53	2 55	3 16	3 31	3 53
17	Tu	8 48	9 6	28 4	7 47	8 6	21 16	0 46	0 59	3 31	3 53	4 11	4 36	3 31	3 53	4 11	4 36
18	We	9 24	9 42	26 9	8 26	8 45	20 9	1 18	1 37	4 11	4 36	4 49	5 8	4 11	4 36	4 49	5 8
19	Th	9 59	10 17	24 6	9 5	9 25	19 3	1 55	2 1	4 49	5 8	5 28	5 49	4 49	5 8	5 28	5 49
20	Fri	10 35	10 52	22 8	9 44	10 5	17 11	2 3	2 56	5 28	5 49	6 11	6 34	5 28	5 49	6 11	6 34
21	Sat	11 11	11 36	20 9	10 26	10 51	16 7	3 18	3 41	6 11	6 34	6 58	7 28	6 11	6 34	6 58	7 28
22	Sun	..	0 6	19 3	11 18	11 47	15 6	4 11	4 46	6 58	7 28	8 2	8 40	6 58	7 28	8 2	8 40
23	Mo	0 31	1 13	19 0	..	0 18	15 4	5 24	6 1	8 2	8 40	9 17	9 51	8 2	8 40	9 17	9 51
24	Tu	1 48	2 23	19 9	0 51	1 29	15 11	6 41	7 16	9 17	9 51	10 25	10 57	9 17	9 51	10 25	10 57
25	We	2 55	3 25	21 8	2 4	2 35	17 2	7 47	8 11	10 25	10 57	11 26	11 52	10 25	10 57	11 26	11 52
26	Th	3 56	4 26	23 8	3 4	3 32	18 8	8 39	9 3	11 26	11 52	..	0 17	11 26	11 52	..	0 17
27	Fri	4 52	5 16	25 10	3 56	4 18	20 1	9 24	9 42	..	0 17	0 38	0 57	..	0 17	0 38	0 57
28	Sat	5 39	6 2	27 8	4 41	5 3	21 4	10 1	10 2	0 38	0 57	1 17	1 37	0 38	0 57	1 17	1 37
29	Sun	6 25	6 49	28 11	5 26	5 50	22 5	10 39	11 1	1 17	1 37	1 57	2 17	1 17	1 37	1 57	2 17
30	Mo	7 10	7 29	29 5	6 10	6 28	22 7	11 26	11 39	1 57	2 17			1 57	2 17		

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 16m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 6th, 9h. 53m. p.m. | First Quarter. 22nd, 4h. 28m. a.m.
 New Moon .. 14th, 1h. 33m. a.m. | Full Moon .. 29th, 1h. 47m. p.m.

M D.	WEEK DAYS.	Barnstable					Bridgewater.					Bristol.				
		Morn		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H. M.	H. M.	F. I			H. M.	H. M.	F. I.			H. M.	H. M.	F. I.		
1	Tuesday..	6 14	6 36	27 6			8 11	8 32	15 5			7 51	8 12	29 8		
2	Wednesday	6 57	7 18	27 6			8 53	9 14	15 5			8 33	8 54	29 8		
3	Thursday..	7 41	8 4	27 1			9 36	9 56	14 11			9 16	9 37	28 10		
4	Friday ..	8 28	8 53	26 4			10 18	10 40	13 11			9 58	10 20	27 6		
5	Saturday..	9 18	9 42	25 4			11 11	11 23	12 8			10 41	11 3	25 8		
6	Sunday ..	10 8	10 35	24 5			11 48	..	11 7			11 28	11 57	23 11		
7	Monday..	11 3	11 34	23 8			0 17	0 49	10 7			..	0 29	22 7		
8	Tuesday..	..	0 10	23 6			1 23	2 2	10 5			1 3	1 42	22 3		
9	Wednesday	0 49	1 30	23 11			2 39	3 16	10 11			2 19	2 56	23 0		
10	Thursday..	2 6	2 37	24 10			3 51	4 21	12 1			3 31	4 4	24 8		
11	Friday ..	3 6	3 35	25 9			4 56	5 27	13 3			4 36	5 7	26 4		
12	Saturday .	4 3	4 28	26 5			5 57	6 22	14 1			5 37	6 2	27 8		
13	Sunday ..	4 54	5 18	26 8			6 48	7 12	14 4			6 28	6 52	28 1		
14	Monday..	5 46	6 0	26 9			7 35	7 57	14 6			7 15	7 37	28 2		
15	Tuesday..	6 20	6 38	26 7			8 16	8 34	14 3			7 56	8 14	28 0		
16	Wednesday	6 56	7 1	26 4			8 52	9 11	13 11			8 32	8 51	27 6		
17	Thursday	7 32	7 52	25 9			9 27	9 45	13 3			9 7	9 25	26 4		
18	Friday ..	8 10	8 30	25 1			10 2	10 19	12 5			9 42	9 59	25 2		
19	Saturday..	8 48	9 7	24 4			10 36	10 52	11 5			10 16	10 32	23 9		
20	Sunday ..	9 25	9 42	23 7			11 7	11 23	10 6			10 47	11 3	22 5		
21	Monday..	10 4	10 25	22 10			11 44	..	9 7			11 24	11 45	21 1		
22	Tuesday..	10 47	11 14	22 2			0 5	0 31	8 9			..	0 11	19 11		
23	Wednesday	11 43	..	22 0			1 1	1 32	8 6			0 41	1 12	19 6		
24	Thursday	0 14	0 49	22 4			2 6	2 39	8 11			1 46	2 19	20 2		
25	Friday ..	1 25	2 0	23 2			3 12	3 45	10 0			2 52	3 25	21 8		
26	Saturday..	2 34	3 2	24 3			4 20	4 51	11 4			4 0	4 31	23 7		
27	Sunday ..	3 28	3 55	25 6			5 19	5 48	12 11			4 59	5 28	25 11		
28	Monday..	4 20	4 47	26 6			6 14	6 41	14 2			5 54	6 21	27 10		
29	Tuesday..	5 12	5 37	27 0			7 7	7 32	14 9			6 47	7 12	28 8		
30	Wednesday	6 1	6 24	27 9			7 58	8 20	15 9			7 38	8 0	30 1		
31	Thursday.	6 47	7 11	28 0			8 43	9 7	16 6			8 23	8 47	30 6		

The above are in Greenwich Mean Time, if local Time be required for
 Barnstable, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 6th, 9h. 33m. p.m. | First Quarter. 22nd, 4h. 28m. a.m.
 New Moon .. 14th, 1h. 33m. a.m. | Full Moon .. 29th, 1h. 47m. p.m.

M. D.	WEEK DAYS	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Tuesday..	6	49	7	11	21	11	7	43	8	4	30	4
2	Wednesday	7	32	7	53	21	11	8	25	8	46	30	4
3	Thursday..	8	16	8	30	21	6	9	8	9	28	29	8
4	Friday ..	9	3	9	28	20	5	9	51	10	12	28	6
5	Saturday..	9	53	10	17	19	2	10	33	10	55	26	11
6	Sunday ..	10	43	11	10	18	1	11	21	11	49	25	5
7	Monday..	11	38	..	..	17	1	..	..	0	21	24	3
8	Tuesday..	0	9	0	45	16	11	0	55	1	34	24	0
9	Wednesday	1	24	2	5	17	6	2	11	2	48	24	8
10	Thursday..	2	41	3	12	18	7	3	23	3	56	26	1
11	Friday ..	3	41	4	10	19	9	4	28	4	59	27	6
12	Saturday..	4	38	5	3	20	7	5	29	5	54	28	7
13	Sunday ..	5	29	5	53	20	10	6	20	6	44	29	1
14	Monday..	6	15	6	35	21	0	7	7	7	29	29	1
15	Tuesday..	6	55	7	13	20	9	7	46	8	6	28	11
16	Wednesday	7	31	7	50	20	5	8	24	8	43	28	1
17	Thursday..	8	7	8	27	19	9	8	51	9	17	27	1
18	Friday ..	8	45	9	5	18	11	9	34	9	51	26	6
19	Saturday..	9	23	9	42	17	11	10	8	10	24	25	3
20	Sunday ..	10	0	10	17	17	0	10	35	10	55	24	2
21	Monday..	10	39	11	0	16	1	11	16	11	37	23	6
22	Tuesday..	11	22	11	49	15	3	..	..	0	3	22	0
23	Wednesday	..	..	0	18	15	0	0	33	1	4	21	1
24	Thursday	0	49	1	24	15	5	1	31	2	11	22	3
25	Friday ..	2	0	2	35	16	6	2	44	3	17	23	6
26	Saturday..	3	9	3	37	17	10	3	52	4	23	25	2
27	Sunday ..	4	3	4	30	19	5	4	52	5	20	27	2
28	Monday..	4	55	5	22	20	8	5	46	6	13	28	9
29	Tuesday..	5	47	6	12	21	3	6	39	7	4	29	6
30	Wednesday	6	36	6	59	22	3	7	30	7	52	30	9
31	Thursday	7	22	7	46	22	6	8	15	8	39	31	1

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.
 For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 6th, 9h. 33m. p.m. | First Quarter. 22nd, 4h. 28m. a.m.
 New Moon .. 14th, 1h. 33m. a.m. | Full Moon .. 29th, 1h. 47m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.			Llanelly.			Milford Haven.		
		Morn.	Even.	Height	Morn.	Even.	Height	Morn.	Even.	Height
1	Tuesday.	6 24	6 41	21 4	6 59	7 21	21 10	6 59	7 21	21 0
2	Wednesday.	7 7	7 28	21 4	7 42	8 3	21 10	7 42	8 3	21 0
3	Thursday.	7 51	8 14	20 10	8 26	8 49	21 4	8 26	8 49	20 7
4	Friday ..	8 38	9 3	20 0	9 13	9 38	20 6	9 13	9 38	19 10
5	Saturday.	9 28	9 52	18 11	10 3	10 27	19 5	10 3	10 27	18 10
6	Sunday ..	10 18	10 45	17 11	10 53	11 20	18 5	10 53	11 20	17 11
7	Monday ..	11 13	11 44	17 1	11 48	..	17 7	11 48	..	17 2
8	Tuesday.	..	0 20	16 11	0 19	0 55	17 5	0 19	0 55	17 0
9	Wednesday.	0 59	1 41	17 5	1 34	2 15	17 11	1 34	2 15	17 5
10	Thursday.	2 16	2 47	18 5	2 51	3 22	18 11	2 51	3 22	18 4
11	Friday ..	3 16	3 45	19 5	3 51	4 20	19 11	3 51	4 20	19 3
12	Saturday.	4 12	4 38	20 1	4 48	5 13	20 7	4 48	5 13	19 11
13	Sunday ..	5 4	5 28	20 4	5 39	6 3	20 10	5 39	6 3	20 2
14	Monday ..	5 50	6 11	20 6	6 25	6 45	21 0	6 25	6 45	20 3
15	Tuesday.	6 36	6 48	20 3	7 5	7 23	20 9	7 5	7 23	20 1
16	Wednesday.	7 6	7 2	20 0	7 41	8 0	20 6	7 41	8 0	19 10
17	Thursday.	7 42	8 2	19 5	8 17	8 37	19 11	8 17	8 37	19 3
18	Friday ..	8 20	8 40	18 8	8 55	9 15	19 2	8 55	9 15	18 7
19	Saturday.	8 58	9 17	17 10	9 30	9 52	18 4	9 33	9 52	17 10
20	Sunday ..	9 35	9 52	17 0	10 16	10 27	17 6	10 16	10 27	17 1
21	Monday ..	10 14	10 35	16 2	10 49	11 10	16 8	10 49	11 10	16 4
22	Tuesday.	0 57	11 24	15 0	11 32	11 55	16 0	11 32	11 59	15 8
23	Wednesday.	11 58	..	15 3	..	0 28	15 9	..	0 28	15 6
24	Thursday.	0 24	0 59	15 8	0 59	1 34	16 2	0 59	1 34	15 10
25	Friday ..	1 35	2 16	16 7	2 10	2 45	17 1	2 10	2 45	16 5
26	Saturday.	2 44	3 12	17 9	3 19	3 47	18 3	3 19	3 47	17 9
27	Sunday ..	3 38	4 5	19 1	4 13	4 40	19 7	4 13	4 40	19 0
28	Monday ..	4 30	4 57	20 2	5 5	5 32	20 8	5 5	5 32	20 0
29	Tuesday.	5 22	5 47	20 9	5 57	6 22	21 3	5 57	6 22	20 6
30	Wednesday.	6 11	6 34	21 7	6 46	7 9	22 1	6 46	7 9	21 3
31	Thursday.	6 57	7 21	21 10	7 32	7 56	22 4	7 32	7 56	21 6

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 6th, 9h. 33m. p.m. | First Quarter. 22nd, 4h. 28m. a.m.
 New Moon .. 14th, 1h. 33m. a.m. | Full Moon .. 29th, 1h. 47m. p.m.

M. D.	W. D.	Newport.				Swansea.				Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.
1	Tu	7	51	8	12	29	11	6	49	7	11	22	11	12	0	..	2 36
2	Wd	8	33	8	54	29	11	7	32	7	53	22	11	0	22	0 43	3 15
3	Th	9	16	9	36	29	1	8	16	8	39	22	5	1	5	1 28	3 56
4	Fri	9	58	10	20	27	10	9	3	9	28	21	5	1	50	2 13	4 40
5	Sat	10	41	11	3	26	0	9	53	10	17	20	2	2	38	3 5	5 26
6	Sun	11	28	11	57	24	2	10	43	11	10	19	1	3	32	4 1	6 20
7	Mo	..	..	0	29	22	11	11	38	..	..	18	1	4	35	5 12	7 18
8	Tu	1	3	1	42	22	8	0	9	0	45	17	11	5	50	6 34	8 28
9	Wd	2	19	2	56	23	4	1	24	2	5	18	5	7	12	7 48	9 45
10	Th	3	31	4	4	25	0	2	41	3	12	19	7	8	19	8 46	10 58
11	Fri	4	36	5	7	26	9	3	41	4	10	20	9	9	11	9 35	11 59
12	Sat	5	37	6	2	27	11	4	38	5	3	21	7	9	59	10 20	0 25
13	Sun	6	28	6	52	28	4	5	29	5	53	21	10	10	41	11 4	1 15
14	Mo	7	15	7	37	28	5	6	15	6	35	22	0	11	25	11 46	1 59
15	Tu	7	56	8	14	28	3	6	55	7	13	21	9	..	0	6	2 41
16	Wd	8	32	8	51	27	10	7	31	7	50	21	5	0	24	0 42	3 20
17	Th	9	7	9	25	26	9	8	7	8	27	20	9	1	2	1 19	3 55
18	Fri	9	42	9	59	25	6	8	45	9	5	19	11	1	38	1 55	4 31
19	Sat	10	16	10	32	24	0	9	23	9	42	18	11	2	15	2 34	5 8
20	Sun	10	47	11	3	22	10	10	0	10	17	18	0	2	53	3 12	5 47
21	Mo	11	24	11	45	21	6	10	39	11	0	17	1	3	32	3 56	6 28
22	Tu	..	..	0	11	20	3	11	22	11	49	16	3	4	22	4 52	7 13
23	Wd	0	41	1	12	19	11	..	..	0	18	16	0	5	25	6 0	8 8
24	Th	1	46	2	19	20	7	0	49	1	24	16	5	6	39	7 12	9 16
25	Fri	2	52	3	25	22	1	2	0	2	35	17	6	7	44	8 14	10 21
26	Sat	4	0	4	31	23	11	3	9	3	37	18	10	8	43	9 7	11 26
27	Sun	4	59	5	28	26	3	4	3	4	30	20	5	9	30	9 52	..
28	Mo	5	54	6	21	28	1	4	55	5	22	21	8	10	13	10 35	0 44
29	Tu	6	47	7	12	28	11	5	47	6	12	22	3	10	59	11 22	1 30
30	Wd	7	38	8	0	30	4	6	36	6	59	23	3	11	47	..	2 15
31	Th	8	23	8	47	30	9	7	22	7	46	23	6	0	10	0 33	3 2

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PORT CHARGES, &c.

APPLEDORE.

Mooring, 1s.

Pilotage, as per agreement.

BARNSTAPLE.

Keelage, 4d. per ton register.

Pilotage, as per agreement.

BIDEFORD.

Harbour Dues.—Vessels discharging at public quay, $\frac{1}{2}$ d. per ton register; at private wharf, 2s. 6d. Pilotage, as per agreement.

BRIDGEWATER.

Pilotage.

From the extreme limits of the navigation in the Bristol Channel, or from any point between such extreme limits and Burnham Church, to the Town, or to any point between the Black Rock and the Town, the vessel being safely moored; also, from the Town to the limits of the navigation; or to any point between Burnham Church and the said limits; the following Rates, viz. :—

				£	s.	d.
On vessels of 30 tons and under				0	6	6
On vessels above 30 tons and under 50 tons				0	8	0
" 50	"	65	....	0	10	0
" 65	"	80	....	0	12	6
" 80	"	100	....	0	15	0
" 100	"	120	....	1	0	0
" 120	"	150	....	1	11	0
" 150	"	200	....	2	11	0
" 200	"	300	...	3	6	0
" 300	"	.....		4	1	0

Bridgewater, continued.

From Burnham Church, or from any point between Burnham Church and the Town, to the Town, or to any intermediate point, the vessel being safely moored, and *vice versa*.

			£	s.	d.
On vessels of 30 tons and under			0	4	6
On vessels above 30 tons and under 50 tons			0	5	6
" 50	"	65	0	6	6
" 65	"	80	0	7	6
" 80	"	100	0	8	6
" 100	"	120	0	10	6
" 120	"	150	1	6	0
" 150	"	200	2	1	0
" 200	"	300	2	11	0
" 300	"	.....	3	4	0

The above Rates are subject to a reduction of one-fourth part in respect of vessels towed by steam vessels.

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first-mentioned ships shall, by any Order of Her Majesty's Most Honourable Privy Council, be privileged to enter the ports of this kingdom, upon paying the same Dues of Tonnage as are paid by British ships; in which case, such ships and vessels not having British registers, shall pay the like Rates of Pilotage only, as are payable by ships having British registers.

If a master choose to employ a pilot for a tide in the navigation, the pilot shall be entitled to receive, for such service, two shillings and sixpence for each tide.

Towage.

	Vessels under 10ft. draftwater per ton register.	Vessels under 11ft. draftwater per ton register.	Vessels under 12ft. draftwater per ton register.	Vessels above 12ft. draftwater per ton register.
To or from Burnham, Black Rock, or any intermediate place, to or from Bridge- water, one tide's work....	s. d. 0 3	s. d. 0 4	s. d. 0 5	s. d. 0 6
To or from Burnham to Black Rock, Dunball, or Cumb- wich, one tide's work	0 1½	0 2	0 3	0 3
To or from Burnham and Highbridge, one tide's work	0 2	0 4	0 5	0 6

Harbour Dues.

One penny per ton register, with 1s. fee for moorage.

*Bridgewater, continued.***Tonnage Rates.***First Class.*—Vessels entering with cargoes or departing with cargoes—

s. d.

INWARDS. —For every ship or other vessel which shall enter the said basin, from any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney, and Sark—per ton measurement ..	0	3
From any other part of Europe except places within the Straits of Gibraltar, and round the North Cape, and from all British Colonies—per ton measurement ..	0	4
From any port or place in Europe round the North Cape, any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa, and any port or place in the United States of America—per ton measurement	0	6
From any port or place in any other part of the world—per ton measurement	0	8
OUTWARDS. —For every ship or vessel which shall depart from the said basin to any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney, and Sark—per ton measurement	1	0
To any other port of Europe except places within the Straits of Gibraltar, and round the North Cape, or to any British Colony—per ton measurement	0	4
To any port or place in Europe round the North Cape, any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa; any port or place in the United States of America—per ton measurement ..	0	6
To any port or place in any part of the world—per ton measurement	0	8
<i>Second Class.</i> —Vessels entering without cargoes or in ballast		
For every ship or other vessel which shall enter into the said basin—per ton measurement	0	2
<i>Third Class.</i> —For every ship or other vessel with a cargo which shall enter the said basin and depart therefrom without breaking bulk, or which shall discharge and afterwards take on board and depart with the same cargo—per ton measurement	0	4
And in estimating the dues contained in the schedule, every vessel of less burthen than twenty tons measurement, shall be rated at twenty tons measurement		
Extra basin dues for overtime—For every coal vessel remaining in the basin beyond ten days, for every coasting vessel beyond fourteen days, and for every foreign vessel beyond thirty days from the time of their respectively entering the same—per ton measurement, per month ..	0	2

BRISTOL.

Rates or Fares for Pilotage.

	If 80 and under 100 tons.		If 100 and under 200 tons.		If 200 and under 300 tons.		If 300 and under 500 tons.		If 500 and under 600 tons.		If 600 and under 900 tons.		If 900 and under 1000 tons.		If 1000 tons and upwards			
	£.	s. d.	£.	s.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.		
BETWEEN																		
Lundy and Coombe	1	1	0	1	8	1	15	0	2	2	2	16	3	3	0	3	10	
Lundy and Swansea or Minehead	2	2	0	2	16	3	10	0	4	4	4	18	6	6	0	7	0	
Lundy and Bridgewater, Cardiff, or the Holmes	2	12	6	3	10	4	7	6	5	5	6	2	7	17	6	8	15	
Lundy and Newport or Kingroad	3	3	0	4	4	5	5	0	6	6	7	7	8	9	9	0	10	10
Coombe and Minehead.....	1	1	0	1	8	1	15	0	2	2	2	9	3	3	0	3	10	
Coombe and Bridgewater, Cardiff, or the Holmes	1	11	6	2	2	2	12	6	3	3	3	13	4	4	14	6	5	5
Coombe and Newport or Kingroad	2	2	0	2	16	3	10	0	4	4	4	18	6	6	0	7	0	
Minehead and Bridgewater, Cardiff, or the Holmes	0	10	6	0	14	0	17	6	1	1	1	4	6	1	11	6	1	15
Minehead and Newport or Kingroad ..	1	1	0	1	8	1	15	0	2	2	2	9	0	3	3	0	3	10
Between any of the following places:— Portishead, Kingroad, Hungroad, Broad Pill, Cumberland or Bathurst Basins, and any other of such places*	0	10	0	0	15	1	0	0	1	5	1	10	0	2	0	0	2	5
Between any two of the following places, viz:—Bridgewater, Cardiff, the Holmes, Newport and Kingroad	0	10	6	0	14	0	17	6	1	1	1	4	6	1	11	6	1	15

* If under 80 tons, 7s. 6d.

*Bristol, continued.***Harbour Dues.**

£. s. d.

For every vessel trading from Africa, Honduras, Surinam, and other ports in South America, the United States of America, the East and West Indies, all the ports within the Straits of Gibraltar, the Southern Whale Fishery, the British Colonies, Portugal, Prussia, Russia, Spain, without the Straits, and Sweden—per ton 0 1 2

For every vessel trading from Flanders, France, without the Straits, Germany, Guernsey, Holland, Jersey, Norway, Poland, and Zealand—per ton 0 0 7

For every vessel trading from Ireland, the Isle of Man, Scotland, or as a Coaster, not including vessels from Cardiff, Newport, and other ports to the Eastward of the Holmes—per ton 0 0 5

For every vessel from Cardiff, Newport, or any other port to the Eastward of the Holmes (not being vessels one-third part of the lading of which shall consist of coal, scroff, iron, tin, tin plates, grain, copper, bricks, stone-coal, tar, slate, bark, timber, or wood), as follows:—

If such vessel shall be under forty tons burthen—for each voyage 0 7 6

If such vessel shall be forty tons burthen, and under seventy-five tons—for each voyage 0 12 6

If such vessel shall be seventy-five tons burthen, and under one hundred tons—for each voyage 0 16 0

If such vessel shall be one hundred tons burthen or upwards—for each voyage 1 1 0

For every vessel from Cardiff, Newport, or any other port to the Eastward of the Holmes, one-third part of the lading of which shall consist of coal, scroff, iron, tin, tin plates, grain, copper, bricks, stone-coal, tar, slate, bark, timber, or wood, as follows:—

If such vessel shall not exceed seventy-five tons burthen—for each voyage 0 5 0

If such vessel shall exceed seventy-five tons burthen—for each voyage 0 7 6

N.B.—There are no Dock Rates or other Port Charges payable on vessels leaving the Port of Bristol.

BRITON-FERRY.**Pilotage.**

From outside of Neath Bar.

Vessels under 40 tons register 7s. 0d.

Vessels over 40 and under 60 tons register 10s. 0d.

With or without Steam.

Briton-Ferry, continued.

For vessels over 60 tons register the rates are as follows :—

Draught of Water.	Without Steam.	With Steam.	Draught of Water.	Without Steam.	With Steam.
£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.
8 feet..	0 11 3	0 8 5	13½ ft. ..	1 2 6	0 16 11
8½ „ ..	0 12 0	0 9 0	14 „ ..	1 8 0	1 1 0
9 „ ..	0 12 6	0 9 5	14½ „ ..	1 13 6	1 5 2
9½ „ ..	0 13 0	0 9 9	15 „ ..	2 1 6	1 11 2
10 „ ..	0 13 6	0 10 2	15½ „ ..	2 10 6	1 18 0
10½ „ ..	0 14 0	0 10 6	16 „ ..	3 1 0	2 5 9
11 „ ..	0 14 6	0 10 11	16½ „ ..	3 12 0	2 14 0
11½ „ ..	0 15 9	0 11 10	17 „ ..	4 5 6	3 4 2
12 „ ..	0 16 10	0 12 8	17½ „ ..	4 19 0	3 14 3
12½ „ ..	0 18 6	0 14 2	18 „ ..	5 13 0	4 5 0
13 „ ..	1 0 6	0 15 5	And 10s. for every ½ ft. over 18 ft.		

Towage.

Under 150 tons register.....	Inwards.....	1½d. per ton register
„ 150 „	Outwards	2d. „
Over 150 „ ..	in and out.....	2d. „

Harbour Dues.

Coastwise or Foreign	1½d. per ton register
Layage	1s. 6d. each vessel

Loading Charges.

Trimming coal, on cargo	2½d. per ton
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Discharging Ballast.

Without reference to quantity—about 1½d. per ton on cargo.

BURRY PORT.**Harbour Dues.**

For every ship, barge, boat, or other vessel, coming into or going out of the harbour of Burry Port, according to its tonnage, the sum of fourpence per ton.

For every ship, barge, boat, or other vessel, running into the inner harbour by stress of weather, and not unloading, the sum of sixpence per ton, and the outer harbour, the sum of fourpence per ton.

Burry Port, continued.

For every ship, barge, boat, or other vessel, coming into the inner harbour from stress of weather, and lying longer than seven days, the sum of threepence per ton per day; and into the outer harbour, the sum of twopence per ton per day.

N.B.—In cases of vessels bona fide seeking freight, the Superintendent, being satisfied thereof, is authorized to remit the dues to 1s. each.

Stemming Rates.

Vessels not exceeding 20 tons register, 6d.; 50 tons, 1s.; 70 tons, 1s. 6d.; 100 tons, 2s.; exceeding 100 tons, 2s. 6d.

Ballast.

For wheeling, per ton register, Outer Harbour, 1d.; Inner Harbour, 1½d.

For use of planks, barrows, and wagons—

	s.	d.		s.	d.
Not above 100 tons register	1	6	Not above 350 tons register	3	6
" 150 "	2	0	" 400 "	4	0
" 200 "	2	6	Above 400 "	4	6
" 300 "	3	0			

Men to be allowed 1s. for assisting to trip the basket, and the same extra charge for the use of crane and tubs, if required.

For Pilotage, see Llanelly.

BURNHAM.

Harbour Dues, 2d. per ton register. Beacons, 4s. per vessel.

Tolls, on coasting vessels, similar to those at Bridgewater;
on Foreign trade vessels, 3d. per ton extra.

Pilotage, as per agreement.

CARDIFF.**Pilotage Rates.**

The limit of this Pilotage is the Port of Cardiff and that portion of the Bristol Channel which lies eastward of Lundy Island, up to and including Kingroad and the River Rhymney to Rhymney Bridge. This Pilotage is not compulsory, but may be obtained over all or any portion of this district, at the discretion of the Masters of Vessels.

Harbour Pilotage.—Every licensed pilot employed in taking a ship or vessel between any dock or harbour in the port of Cardiff and any point in Cardiff Roads, or *vice versa*, shall be paid according to the registered tonnage of such vessel, as follows:—

Cardiff, continued.

FOR LADEN VESSELS.		£	s.	d.
If under 60 tons		0	5	0
60 tons and under 100 tons		0	7	6
100 " 150 tons		0	10	0
150 " 200 tons		0	12	6
200 " 250 tons		0	15	0
250 " 300 tons		0	17	6
300 " 400 tons		1	1	0
400 " 500 tons		1	5	0
500 " 600 tons		1	7	6
600 " 800 tons		1	10	0
800 " 1000 tons		1	15	0
1000 " 1250 tons		2	10	0
1250 tons and upwards		3	0	0

For all vessels in ballast, the charges to be one-fifth less than the above rates.

Channel Pilotage.—Any ship or vessel sailing to and from the port of Cardiff, upon or in the waters of the Bristol Channel between Lundy Island and Kingroad, for which the services of a duly licensed pilot may be required and rendered, shall pay according to the registered tonnage of such vessel, as follows:—

FOR LADEN VESSELS.

		1st Limit.			2nd Limit.			3rd Limit.		
		£	s.	d.	£	s.	d.	£	s.	d.
If under 150 tons		0	15	0	1	5	0	2	0	0
150 tons and under 200 tons....		0	17	6	1	10	0	2	7	6
200 " 300 tons....		1	0	0	1	17	6	2	17	6
300 " 400 tons....		1	5	0	2	5	0	3	5	0
400 " 500 tons....		1	7	6	2	10	0	3	10	0
500 " 600 tons....		1	10	0	2	15	0	4	0	0
600 " 800 tons....		1	15	0	3	0	0	4	7	6
800 " 1000 tons....		2	0	0	3	15	0	5	10	0
1000 " 1250 tons....		2	10	0	4	15	0	7	0	0
1250 tons and upwards		3	0	0	5	15	0	8	10	0

For all vessels in ballast, the charges to be one-fifth less than the above rates.

FIRST LIMIT.—Between Cardiff Roads and Nash or Kingroad, or any point east of Nash, and west of Kingroad.

SECOND LIMIT.—Between Cardiff Roads and Combe, or any point west of Nash and east of Combe.

THIRD LIMIT.—Between Cardiff Roads and Lundy Island, or any point west of Combe.

Any pilot who may be required to remain on board any ship or vessel for the convenience of the captain, master, owner, or agent, after he shall have discharged the duties for which he was engaged, shall be paid ten shillings per day for every day he may be employed,

Cardiff, continued.

and any Pilot who may be required to move any ship or vessel from one dock or tidal harbour to another dock or tidal harbour, occupying only one tide, shall be paid for every ship

		s.	d.
Not exceeding 100 tons register.....		5	0
100 and not exceeding 300	"	10	0
300	500	12	6
500	800	17	6
500 and upwards		25	0

Towage.

Inwards, in ballast	1½d. per ton register.
" with cargo	2d. "
Outwards	2d. per ton.

Town Dues.

Under 60 tons register	2s. 6d. per vessel
Above 60 tons register	5s. 0d. "

Loading Charges.

Trimming coal (single deck)	2½d. per ton cargo
" (double deck)	3d. "
Wharfage on Cargo	2d. "

Discharging Ballast.

Vessels under 200 tons	5d. per ton on quantity.
200 tons and under 400 tons	6d. "
400 " 600 tons	7d. "
600 " 800 tons	8d. "
800 and upwards.....	9d. "

Tonnage Rates.—Bute Docks.

FIRST CLASS. —On all sailing, steam, or other vessels entering from or departing for any port in the United Kingdom, Isle of Man, Jersey, Guernsey, Alderney, and Sark, under 100 tons register	a.	d.
100 tons and under 200 tons register	per register ton	0 1½
200 tons register and upwards (except steam vessels) ditto		0 2
Steam vessels 200 tons register and upwards	ditto	0 3
		0 2

SECOND CLASS. —On all sailing, steam, or other vessels entering from or departing for any port in Europe, between the North Cape and Cape Finisterre	per register ton	0 5
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THIRD CLASS. —On all sailing, steam, or other vessels entering from or departing for any other port in Europe, and the Mediterranean ..	per register ton	0 7
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Cardiff, continued.

FOURTH CLASS.—On all sailing, steam, or other vessels entering from or departing for all other foreign ports whatsoever,

per register ton 0 9

FIFTH CLASS.—On all sailing, steam, or other vessels which do not enter within the gates of any dock or basin, but which either discharge or receive passengers or goods upon or from any pier, landing-place, or jetty per register ton 0 3

SIXTH CLASS.—On all sailing, steam, or other vessels using the Tidal Harbour of the undertakers per register ton 0 0½

If any sailing, steam, or other vessel, being of less than 200 tons measurement, shall remain within any dock or basin for a period longer than ten days; or being of 200 tons and less than 400 tons measurement, for a longer period than fourteen days; or being of 400 tons measurement or upwards, for a period longer than twenty-one days, then for the period during which the vessel remains beyond those periods respectively, the further rates following (that is so say):

For the first week or any part thereof . . . per register ton 0 1

For the second week or any part thereof ditto 0 1½

For every week or part of a week beyond the second week ditto 0 2

Penarth Harbour, Dock, and Railway.**Harbour Dues.**

Vessels not exceeding 200 tons register, per ton register, ½d.

Vessels above ditto 1d.

Ballast Rates.

Under 200 tons register, 5d. per ton of Ballast discharged.

200 and under 400 6d. per ton.

400 and under 600 7d. per ton.

600 and under 800 8d. per ton.

800 and upwards 9d. per ton.

Discharging by night 3d. per ton extra on the quantity so discharged.

The Dock Dues and Charges are the same as at the Bute Docks, Cardiff

CARMARTHEN.**Harbour Dues.**

	s.	d.		s.	d.
Vessels under 30 tons	1	0	Vessels 80 to 90 tons	2	6
30 to 60 tons	1	6	90 to 110 tons	3	0
60 to 80 tons	2	0	110 tons and upwards	5	0

Pilotage, as per agreement.

CHEPSTOW.**Harbour Dues.**

One penny per ton register, on all vessels loading or unloading alongside a wharf; also, on all vessels entering or departing the river, if from or to the eastward of the Holmes, 4d.; from or to the westward of the Holmes, 2s. 4d.

Pilotage.—The same as Gloucester.

CLOVELLY.**Harbour Dues.**

Vessels not exceeding 20 tons, 1s.; 20 to 50 tons, 2s.; above 50 tons ½d. per ton.

Pilotage, &c., as per agreement.

GLOUCESTER & BERKELEY CANAL.**Rates of Tonnage.**

Charged upon gross and register weight, and on the ton of 20 cwt. of 112 lbs.

IMPORTS.

	Foreign.		Coast-wise.	
	s.	d.	s.	d.
ALE, beer, porter, cider and perry, per brl. of 36 galls.	0	4	0	4
—ditto, in bottle per dozen	0	1	0	1
Barilla per ton	1	6	1	0
Bricks, for building per 1000	2	0	2	0
— scouring, fire, and tiles .. per ton	2	0	1	0
Brimstone "	1	6	1	0
Bones "	1	0	1	0
Burr stones "	1	6	1	0
Clay "	0	6	0	6
Coals "	0	6	0	6
CORN AND MEAL—				
Wheat, and all corn and seed "	1	9	1	6
Flour and other meal "	2	0	2	0
Bran and gurgeons "	1	6	1	6
Earths "	1	0	1	0
Gunpowder "	5	0	5	0
Kelp "	1	6	1	6
Marble per ton of 14 cubic ft.	1	6	1	6
Manure per ton	1	0	1	0
METALS AND ORES—				
Copper, spelter, tin, zinc and manganese ..	2	0	0	9
Metallic ores "	0	9	0	6
Pig iron, and old or loose iron "	2	0	0	9
All other description of iron "	2	0	0	9

Gloucester and Berkeley Canal, continued.

IMPORTS, continued.					Foreign.		Coasting	
					s.	d.	s.	d.
Oil cake	per ton				1	6	1	0
Oysters	per ton of 10 bushels				1	6	1	6
Potatoes	per ton				1	0	1	0
Slates	"				1	0	1	0
Stone, for roads, pitching, lime, chalk, flint, gravel, and sand	"				0	6	0	6
— for building, block, paving, &c. ..	"				1	0	1	0
— burr stones	"				1	6	1	0
SPIRITS and WINE— .. per pipe, pun. or butt					2	6	2	6
— .. per half ditto, or hogshead					1	3	1	3
— .. all casks under					0	6	0	6
— in bottle per dozen					0	1	0	1
WOOD AND WOOD GOODS—								
Mahogany and fine wood* .. per ton					2	0	2	0
Other timber and poles†	"				1	6	1	6
Lathwood per fathom of 4 feet					2	0	2	0
Deals and battens, per Petersburgh standard of 120, 12 ft. long, 11 in. wide, and 1½ in. thick					3	4	3	4
Railway sleepers per ton					0	9	0	9
Staves, Baltic pipe per 120					3	6	3	6
— Puncheon and hogshead ..					3	0	3	0
— Quebec standard	"				1	6	1	6
— Barrel	"				1	0	1	0
— West India Pun	"				0	6	0	6
— New Brunswick small	"				0	3	0	3
Laths per 1000					0	4	0	4
UNENUMERATED ARTICLES per ton					2	0	1	0
EXPORTS.								
Bark per ton					0	6	1	0
Brick of all kinds	"				0	6	0	6
Clays	"				0	6	0	6
Coals	"				0	3	0	3
Corn, flour, and meal	"				0	6	0	6
METALS AND ORES—								
Metallic ores					0	6	0	6
"Puddle-bars," Pig-iron, and rough cast-iron pipes	"				0	6	0	6
All other description of iron and metals ..	"				0	6	0	9
Salt	"				0	6	0	6
UNENUMERATED ARTICLES	"				0	6	1	0

* Mahogany, Oak, Ash, Elm, Beech, and other heavy Timber or Wood, 40 feet to the ton.

† Fir, Pine, Deal, and light Woods, 50 feet to the ton.

*Gloucester and Berkeley Canal, continued.***Regulations.**

Tonnage.—One-half of the above Rates shall be charged upon goods conveyed along any part of the canal between the Stroud Junction and Sharpness Point, or the Stroud Junction and Gloucester, excepting goods coming under the operation of the 8th, 9th, or 10th regulations.

If it be proved to the satisfaction of the toll collectors that the full rate of tonnage has been paid upon any goods which have passed along the canal, half the full tonnage only shall be charged on such goods repassing along the canal, unless such half rate shall exceed the amount of the export rate, in which case the export rate upon such goods shall be charged.

All goods brought into the canal for sale, and not sold, and then exported in the same bottom, without being landed, shall only be charged with the import rate.

All goods exported in the same bottom, or transhipped for export, shall be charged with the import rate.

All goods brought into the canal, forming part of a cargo, the original destination of such goods being for any other port than Gloucester, and not landed nor transhipped, shall pass in and out of the canal free of charge, the vessel carrying such goods paying lockage.

All vessels partly laden entering the canal at Sharpness or Gloucester, to complete their cargoes, shall only be charged tonnage rates on the merchandize shipped in the canal, and the usual lockage charges; provided such inward lading is not landed nor transhipped.

All goods brought into the canal at Gloucester or Sharpness, either by land or water conveyance, and intended for exportation, shall not be charged the tonnage rates until shipped.

All Corn brought to Gloucester from Stroud by the canal shall pay a rate of 4d. per ton; and all Flour, Bran, and Gurgeons so brought shall pay a rate of 6d. per ton.

All goods brought into the canal at Gloucester, by the Severn, from places above Gloucester, or to the docks at Gloucester, by land carriage, and not conveyed upon the canal below Hempstead Bridge, except goods coming under the 10th regulation, shall pay a rate of 4d. per ton, or the rate by the table, if it be less than 4d.

All goods simply crossing the canal from the South Wales Railway Quay to the yards on the opposite side, lying to the north of the Salt Warehouses, or *vice versa*, not having previously paid canal dues, shall pay a rate of 2d. per ton.

Wharfage.—Goods remaining upon the wharfs (except the wharf specified in the foregoing regulation), for above *forty-eight hours*, *twopence* per ton. And all goods remaining upon any of the wharfs,

Gloucester and Berkeley Canal, continued.

excepting the north wharf, shall be further charged wharfage at the rate of *twopence* per ton per week, and at that rate for any part of a week they may so remain after the expiration of the forty-eight hours. And all goods remaining upon the "*North Wharf*," shall be further charged wharfage at the rate of *one shilling* per ton per week, and at that rate for any part of a week they may so remain, after the expiration of the forty-eight hours.

All goods deposited upon the wharf underneath the "*Pillar Warehouse*," upon the west side of the basin, and remaining there longer than twenty-four hours, shall be charged 1d. per ton per day.

Goods, carriages of every description, and all other things, shall only be placed on the wharfs, roads, and premises of the Canal Company in such manner, and on such parts thereof as the officers of the Company may direct; and if any goods, carriages, or other things shall be placed contrary to their directions, the officers of the Company may remove the same; and wharfage at the rate of 6d. per ton per hour shall be charged, after notice shall have been given to remove the same.

Floatage of Timber.—For Timber discharged from vessels into the canal, on the south side of "*Siller's Bridge*," and remaining afloat on the south side of such bridge, after the expiration of thirty days, a floatage rate of one halfpenny per stick per week shall be paid, and in like proportion for any part of a week; and if such timber should be removed to any part of the canal, on the north side of such bridge, a floatage rate of 1d. per stick for the first week after such removal, and 2d. per stick per week afterwards, and in like proportion for any part of a week, shall be paid.

For timber discharged from vessels into the canal, on the north side of "*Siller's Bridge*," and remaining afloat on the north side of such bridge, after the expiration of fifteen days, a floatage rate of 1d. per stick per week shall be paid, and in like proportion for any part of a week; and should it remain afloat on the north side of such bridge longer than twenty-eight days, after the fifteen days, 2d. per stick per week, and in like proportion for any part of a week, shall be paid.

All timber sold and delivered from one merchant to another, and put into the canal from the yards, and floating in the canal or basins two weeks following, shall pay 2d. per stick per week, and in like proportion for the whole time it may remain afloat. And all timber imported in trows or barges discharged into the canal, shall be subject to the same regulation and charge.

No timber shall be permitted to remain afloat, so as to endanger the navigation of any vessel along the canal, or interrupt or render inconvenient the navigation of the canal.

*Gloucester and Berkeley Canal, continued.***Cranage.**

			£	s.	d.	
For each lift under 2 tons	..		0	0	3	per ton.
2 tons and under 5 "	..		0	0	6	"
5 "		6 "	0	10	0	for each lift.
6 "		7 "	0	12	0	"
7 "		8 "	0	16	0	"
8 "		9 "	1	2	0	"
9 "		10 "	1	10	0	"
10 tons.....			2	0	0	"

All lifts exceeding 10 tons can only be made by special agreement with the Company, and at rates not less than 10s. for every ton above the preceding.

			£	s.	d.	
10 tons and under 11 tons	..		2	0	0	for each lift.
11 "		12 "	2	10	0	"
12 "		13 "	3	0	0	"
13 "		14 "	3	10	0	"
14 "		15 "	4	0	0	"

Lockage.—Every vessel passing through the Company's locks empty or in ballast, shall pay 1d. per ton on the register tonnage for each lock of water; and every vessel bringing into, or conveying along the canal, a less quantity of goods than her register tonnage, shall pay 1d. per ton per lock on the difference between the tonnage of the goods on board and the register tonnage of the vessel,—provided that the hold of the vessel is not full.

In all cases of removal of goods, wares, and merchandize, from the Company's wharfs or docks, through the locks, upon which the above rates of tonnage have been paid, such further payment only shall be made as will amount to 1d. per ton on the register tonnage of the vessel departing with such goods.

Moorage.—All vessels remaining in the canal or basins longer than one calendar month, shall be charged upon the register tonnage the following rates, viz.:—One halfpenny per ton per week, if such vessels shall be moored, or remain on the north side of Hempstead Bridge; and one farthing per ton per week, if moored, or remaining in any part of the canal below Hempstead Bridge.

Lockage and Moorage.—Boats and vessels under twenty tons burthen shall be rated as twenty tons.

Weighing Machine Rates.—For coal, manure, stone, and gravel 2d. per ton; all other goods, 3d. per ton.

Tracking.—The following scale of charges shall be paid by the masters of vessels for tracking, viz.:—

*Gloucester and Berkeley Canal, continued.**For the whole length of the Canal:*

For vessels under 26 tons 8s. 6d. each way.

,, above 26 and not exceeding 150 tons, 4d. per ton.

,, above 150 { for 150 tons..... 4d. ,,
 for the remainder 2½d. ,,

One-half of the above rates shall be paid to and from the Junction, and ¼d. per ton per mile for all intermediate distances.

Ballast.If put on board at the Ballast Banks..... s. d.
0 8 per ton.

If brought in carts, or alongside afloat, either at Gloucester, or within two miles thereof..... 1 0 ,,

If thus taken in carts or afloat at any other part of the Canal 1 2 ,,

If in the tidal Basin at Sharpness 1 6 ,,

All ballast not supplied by the ballast contractor will be charged tonnage at the rate of 6d. per ton.

Canal Pilotage.*The Canal Pilots are authorized to demand and take the following charges for Piloting Vessels up or down the Canal:—*

Vessels under 75 tons register..... 5s. 0d. up or down.

Vessels 75 and under 100 tons register .. 7s. 6d. ,,

Register Tonnage.		Draft of Water.		Charge.	Register Tonnage.		Draft of Water.		Charge.
		ft. in.		s. d.			ft. in.		s. d.
100 ..		11 0	..	10 0	375 ..		13 9	..	21 0
125 ..		11 3	..	11 0	400 ..		14 0	..	22 0
150 ..		11 6	..	12 0	425 ..		14 3	..	23 0
175 ..		11 9	..	13 0	450 ..		14 6	..	24 0
200 ..		12 0	..	14 0	475 ..		14 9	..	25 0
225 ..		12 3	..	15 0	500 ..		15 0	..	26 0
250 ..		12 6	..	16 0	525 ..		15 3	..	27 0
275 ..		12 9	..	17 0	550 ..		15 6	..	28 0
300 ..		13 0	..	18 0	575 ..		15 9	..	29 0
325 ..		13 3	..	19 0	600 ..		16 0	..	30 0
350 ..		13 6	..	20 0					

And 6d. additional for every three inches draft of water above.

Channel and River Pilotage.**LIMIT.**—The Bristol Channel eastward of Lundy Island, including the River Severn to the City of Gloucester and the River Wye to Chepstow Bridge.

Every licensed pilot employed in piloting vessels to or from the port of Gloucester shall be paid the following Pilotage rates, according to the register tonnage of the vessel:—

Gloucester and Berkeley Canal, continued.

			To or from Lundy and								
			Holmes or Cardiff Roads.			Kingroad.			Sharpness.		
			£	s.	d.	£	s.	d.	£	s.	d.
Under 100 tons ..	...		1	10	0	2	0	0	4	0	0
100 tons and under 200			2	0	0	2	10	0	5	0	0
200	"	300	2	7	6	3	0	0	6	0	0
300	"	400	2	15	0	3	10	0	7	0	0
400	"	500	3	5	0	4	2	6	8	5	0
500	"	600	3	15	0	4	15	0	9	10	0
600	"	800	4	5	0	5	7	6	10	15	0
800	"	1000	5	0	0	6	5	0	12	10	0
1000 tons and upwards			5	15	0	7	5	0	14	10	0

			To or from Nash Point or Minehead and Holmes or								
			Cardiff Roads.			Kingroad.			Sharpness.		
			£	s.	d.	£	s.	d.	£	s.	d.
Under 100 tons			1	0	0	1	10	0	3	10	0
100 tons and under 200			1	5	0	1	15	0	4	5	0
200	"	300	1	10	0	2	2	6	5	2	6
300	"	400	1	15	0	2	10	0	6	0	0
400	"	500	2	2	6	3	0	0	7	2	6
500	"	600	2	10	0	3	10	0	8	5	0
600	"	800	2	17	6	4	0	0	9	7	6
800	"	1000	3	7	6	4	12	6	10	17	6
1000 tons and upwards			3	17	6	5	7	6	12	12	6

			To or from Holmes or Cardiff Roads and Kingroad.								
			Kingroad.			Sharpness.					
			£	s.	d.	£	s.	d.			
Under 100 tons			0	10	0	2	10	0			
100 tons and under 200			0	12	6	3	2	6			
200	"	300	0	15	0	3	15	0			
300	"	400	0	17	6	4	7	6			
400	"	500	1	2	6	5	5	0			
500	"	600	1	7	6	6	2	6			
600	"	800	1	12	6	7	0	0			
800	"	1000	1	17	6	8	2	6			
1000 tons and upwards			2	2	6	9	7	6			

To or from Kingroad or Sharpness:—

			£	s.	d.				£	s.	d.
Under 40 tons			0	15	0	300 tons and under 400			3	10	0
40 tons and under 60			1	1	0	400	"	500	4	2	6
60	"	80	1	11	6	500	"	600	4	15	0
80	"	100	2	0	0	600	"	800	5	7	6
100	"	200	2	10	0	800	"	1000	6	5	0
200	"	300	3	0	0	1000 tons and upwards			7	5	0

Gloucester and Berkeley Canal, continued.

Pilots taken on board any vessel inward bound to the westward of Ilfracombe, shall be paid the same Pilotage rates as from Lundy Island; if between the Nash Point and Ilfracombe, the same rates as from the Nash Point; if between the Nash Point and the Holmes, the same rates as from the Nash Point; and if between the Holmes and Kingroad, the same rates as from the Holmes.

Pilots discharged from any vessel on the outward voyage between any of the stages mentioned in the above scale of rates, shall be paid the same Pilotage rates as if they had been taken to the next stage beyond the place where they were discharged.

All vessels piloted to Chepstow or to Lydney shall pay the same Pilotage rates as to Sharpness, and vice versa, with the exception of Coal-laden vessels coastwise to and from Lydney, under 200 tons register, for which a special scale of charges, at a reduced rate, is provided by the 4th Pilotage Bye-Law.

Vessels piloted from Sharpness to Lydney, or from Lydney to Sharpness, and then to Kingroad, shall pay the same rates as between Sharpness and Kingroad.

Vessels piloted to and from any place in the River Severn above Sharpness, shall pay one-fourth more than the rates between Sharpness and Kingroad.

All light vessels between Kingroad and Sharpness, or any intermediate point, shall be entitled to one-fifth reduction on the full pilotage charges for that portion of the district; and all vessels propelled or towed wholly by steam power, between Kingroad and Sharpness, or any intermediate point, shall be entitled to a further reduction of one-fourth of the full pilotage charges for that portion of the district.

Vessels taking a Pilot from Kingroad to any place on the River Severn, must employ assistants to the Pilot, whose number and payment are regulated by the 6th Pilotage Bye-Law.

Vessels retaining a Pilot on board after he has discharged the duties for which he was engaged, or whilst waiting for water up the River Severn, or whilst delayed by contrary winds when outward bound, and vessels in charge of a Pilot compelled to bear up and return from the westward from stress of weather or accident, must compensate him according to the regulations contained in the 7th, 8th, and 9th Pilotage Bye-Laws.

In addition to the foregoing charges, a Collector's Fee, varying according to the size of the vessel, from 6d. to 2s. 6d., is payable under the 10th Pilotage Bye-Law.

HAVERFORDWEST.

Keelage and Wharfage.—One penny per ton registered tonnage.

ILFRACOMBE.**Keelage.**

For every ship or vessel driven in by stress of weather, &c.

Coasters belonging to the port 0s. 6d.

„ not belonging to the port 1s. 6d.

Vessels going to or coming from any of Her Majesty's Plantations in Asia, Africa, or America, 2s. 6d.

Also, for every vessel paying Keelage, the additional sum of 6d. for each Top borne by such vessel.

Lighthouse.

For every vessel belonging to the port..... 0s. 6d.

For every vessel not belonging to the port .. 1s. 0d.

The Light is kept up from the first day of September to the last day of April in every year.

Mooring Chains and Buoys.

Smacks, 1s.

Two-mast vessels, 2s.

Foreign-going, 1s. extra.

When the Light is out, 6d. each less for vessels belonging to the Harbour, and 1s. each less for vessels not belonging to the Harbour.

LLANELLY.**Pilotage.**

LIMIT No. 1.—If a Pilot be taken on board as far to the westward as to bring Rhossilly Church open to the westward of the Holmes, he is to be paid for every foot of water the vessel may draw.

LIMIT No. 2.—If taken on board within No. 1, but to the westward of No. 4 buoy for Pembrey, or No. 6 for Llanelly.

	Limit No. 1.			Limit No. 2.			Outwards.	
	s.	d.		s.	d.		s.	d.
Under 50 tons register	1	9	..	1	0	..	0	6
From 50 to 75 „	2	0	..	1	3	..	0	9
75 to 100 „	2	3	..	1	6	..	1	0
100 to 125 „	2	6	..	1	9	..	1	3
125 to 150 „	2	9	..	2	0	..	1	6
150 to 175 „	3	0	..	2	3	..	1	9
175 to 200 „	3	3	..	2	6	..	2	0
200 to 225 „	3	6	..	2	9	..	2	3

And 3d. per foot for every additional 25 tons register.

Pilots taken on board inside buoy No. 6, when bound for Llanelly, or inside No. 4, when bound for Pembrey, to be paid 2s. 6d. each for a hobble.

Llanelly, continued.

If any vessel shall evade being boarded by a Pilot in Limit No. 1, she shall pay for Limit No. 1, although boarded above that limit, beside the penalty for refusing a Pilot.

Each vessel to pay 1s. for the boat.

That when any vessel, not exceeding 125 tons register, shall have the assistance of a steam-tug in taking her out to sea, a reduction of ten per cent. shall be made on her outward Pilotage.

That all vessels proceeding above Llanelly shall pay as follows, in addition to the rates inwards and outwards from Llanelly :—

	To or from Penclawdd.			To or from Spitty.			Penclawdd to Spitty.	
	s.	d.		s.	d.		s.	d.
Under 50 tons register..	3	6	..	5	0	..	3	6
From 50 to 100 „ ..	4	6	..	7	0	..	4	6
100 to 150 „ ..	5	6	..	9	0	..	5	6
150 to 200 „ ..	7	0	..	10	6	..	7	0

And 6d. for every additional 25 tons register.

Harbour Pilotage.

Under 50 tons, 2s. ; 50 and under 75, 2s. 6d. ; 75 and under 100, 3s.

For removing vessels between

	Llanelly and Pembrey.			Pembrey and Burry Port.	
	s.	d.		s.	d.
Under 50 tons register	3	6	..	3	6
75 „	4	6	..	4	0
100 „	5	6	..	4	6

For every additional 25 tons—Llanelly and Pembrey, 1s. ; Pembrey and Burry Port, 6d.

Vessels sailing from the port, and putting back after having discharged their Pilots, to pay half pilotage in and out.

Three shillings and sixpence to be the rate charged for a Bar hobble.

“Ceres” Pilot Ship.

That a charge of 2s. 6d. per 100 tons register be made upon every vessel taking a Pilot boarded from the “Ceres.”

Ballast Rates.

Every vessel shall pay for every ton discharged, 5½d.

For each man otherwise employed, ¼d. per ton.

Buoyage Dues.

For every ship or other vessel entering into the Rivers Burry, Loughor, and Lliedi, or either of them, from and over the Bar of Burry, 1d. per ton register, and ¼d. per ton for Light Dues.

*Llanelly, continued.***Dock Dues.**

Llanelly or New Dock..... 2d. per ton register.

Copper Works' Dock 1d. „

Carmarthenshire Dock, 1d. per ton register, for vessels entering or using the Dock; and 1d. per ton the first week, and a farthing per ton every week, after, if for repairs or lying up.

LYDNEY.**Tonnage Rates.**

	s.	d.		s.	d.
1 to 10 tons burthen ..	1	0	45 to 50 tons burthen ..	4	6
11 to 20 „ ..	2	0	51 to 80 „ ..	5	0
21 to 30 „ ..	3	0	81 to 100 „ ..	6	0
31 to 44 „ ..	4	0	101 tons and upwards....	7	6

Pilotage.—The same as Gloucester.

MILFORD.**DEFINITION OF LIMITS.**

From Caldy Island along the coast to St. David's Head, and from thence to Cardigan Island, and *vice versa*; and to and from, and into and out of all ports and places within these Limits.

Pilotage Rates.

	Under 14ft. per foot.			14ft. & Up. per foot.		
	£	s.	d.	£	s.	d.
From a line drawn from St. Ann's Point to Sheep's Island, to any part of the Harbour below a line drawn from Newton Noyse Point to Martin's Haven	0	2	6	0	3	6
From a line drawn from St. Ann's Point to Sheep's Island, or from Habberstone Road to any place above a line drawn from Newton Noyse Point to Martin's Haven in addition	0	2	0	0	2	6

Vessels inward-bound not boarded until they have passed a line drawn from Rat Island to Watwick Point, are to pay one-fourth less than the foregoing rates; and if not boarded until they have passed a line drawn from Thorne Island to Great Castle Head, they are to pay one-half only of the said rates; and if not boarded until they have passed the Stack Rock, to a line from Newton Noyse Point to Martin's Haven, they are not to be chargeable with any Pilotage, unless the masters thereof require Pilotage assistance.

*Milford, continued.***Additional Rates.***For Ships boarded without the entrance of the Harbour.*

	£	s.	d.
From a line drawn from Leuny Point to Skokham Island			
in addition, per foot	0	2	0
If to the southward of St. Gowan's Head, ditto	0	1	0
Or from Caldy Island eastward, or from the westward of the Grassholm, or three leagues without Leuny Point, in addition to the Harbour Pilotage	3	3	0
Six leagues, ditto	4	4	0
Ten leagues, ditto	6	6	0

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first-mentioned ships shall, by an order of Her Majesty's Most Honourable Privy Council, be privileged to enter the ports of this Kingdom, upon paying the same duties of tonnage as are paid by British ships; in which case such ships and vessels, not having British registers, shall pay the like rates of Pilotage only as are payable by ships having British registers. The said surplus rate chargeable on unprivileged Foreign vessels is to be paid to the Collector of this Corporation's Light Duties, at the Custom House, Milford.

Port Charges.

	£	s.	d.
Keelage.. .. .	0	0	4
Making fast to the rings	0	0	6
Quayage and moorage per ton register	0	0	0½
Foreign vessels, loading or discharging, per ton	0	0	6
Coasting vessels, loading or discharging, per ton	0	0	2
Loading ballast, per ton	0	0	2
Deposit for landing ballast on quay.. .. .	1	0	0
Ballast lying on the quay, per ton	0	0	0½
Use of beach discharging	0	1	0
Use of beach outfitting or repairing, per ton register	0	0	1
Vessels lying alongside the quay for any period not exceeding one month, per ton register	0	0	2
And for every succeeding month	0	10	0

NEATH.**Tonnage Rates.**

For every ship or vessel which shall anchor, load, or unload within the said port, or which shall be made fast to any pier or other work within the same, or any part thereof, the sum of 1½d. per ton of the register tonnage of such ship or vessel.

*Neath, continued.***Rates of Pilotage.**

LIMIT.—From the outside of Neath Bar into the Port and Harbour of Neath, and *vice versa*.

FIRST STATION.—From outside of Neath Bar to the Layer, and to any distance between the Layer and the southern end of Abbey Estate, and *vice versa*.

Vessels under 40 tons register, 7s.; over 40 and under 60, 10s.; with or without Steam.

SECOND STATION.—From outside of Neath Bar to any distance lying between the inner termination of the First Station and the Abbey Pill, and *vice versa*.

Vessels under 40 tons register, 8s.; over 40 and under 60, 11s.; with or without Steam.

THIRD STATION.—From outside of Neath Bar to any distance lying between the Abbey Pill and Neath Bridge, and *vice versa*.

Vessels under 40 tons register, 9s. 6d.; over 40 and under 60, 13s. 6d.; with or without Steam.

For vessels over 60 tons register, the rates are as follows:—

Draught of Water.	1st Station.			2nd Station.			3rd Station.		
	Without Steam.	With Steam.		Without Steam.	With Steam.		Without Steam.	With Steam.	
	£ s. d.	£ s. d.		£ s. d.	£ s. d.		£ s. d.	£ s. d.	
8 feet ..	0 11 3	0 8 5		0 12 9	0 9 7		0 14 9	0 11 1	
8½ " ..	0 12 0	0 9 0		0 13 6	0 10 2		0 16 0	0 12 0	
9 " ..	0 12 6	0 9 5		0 14 0	0 10 6		0 16 6	0 12 5	
9½ " ..	0 13 0	0 9 9		0 14 6	0 10 11		0 17 0	0 12 9	
10 " ..	0 13 6	0 10 2		0 15 0	0 11 3		0 18 0	0 13 6	
10½ " ..	0 14 0	0 10 6		0 16 0	0 12 0		0 19 0	0 14 3	
11 " ..	0 14 6	0 10 11		0 16 9	0 12 7	1 0 0	0 15 0	0 15 0	
11½ " ..	0 15 9	0 11 10		0 18 3	0 13 8	1 1 6	0 16 2	0 16 2	
12 " ..	0 16 10	0 12 8		0 19 10	0 14 11	1 3 1	0 17 4	0 17 4	
12½ " ..	0 18 6	0 14 2	1 2 0	0 16 6	1 5 3	0 18 11	0 18 11	0 18 11	
13 " ..	1 0 6	0 15 5	1 4 6	0 18 5	1 8 0	1 1 1	1 1 1	1 1 1	
13½ " ..	1 2 6	0 16 11	1 7 0	1 0 3	1 10 6	1 2 11	1 2 11	1 2 11	
14 " ..	1 8 0	1 1 0	1 13 0	1 4 9	1 17 0	1 7 9	1 7 9	1 7 9	
14½ " ..	1 13 6	1 5 2	1 19 6	1 9 8	2 4 6	1 13 5	1 13 5	1 13 5	
15 " ..	2 1 6	1 11 2	2 8 6	1 16 5	2 14 6	2 0 11	2 0 11	2 0 11	
15½ " ..	2 10 6	1 18 0	2 17 9	2 3 4	3 5 3	2 8 11	2 8 11	2 8 11	
16 " ..	3 1 0	2 5 9	3 8 6	2 11 5	3 17 0	2 17 9	2 17 9	2 17 9	
16½ " ..	3 12 0	2 14 0	4 0 6	3 0 5	4 10 6	3 7 11	3 7 11	3 7 11	
17 " ..	4 5 6	3 4 2	4 14 0	3 10 6	5 6 0	3 19 6	3 19 6	3 19 6	
17½ " ..	4 19 0	3 14 3	5 8 0	4 1 0	6 2 0	4 11 6	4 11 6	4 11 6	
18 " ..	5 13 0	4 5 0	6 3 0	4 12 3	6 19 0	5 4 3	5 4 3	5 4 3	

And 10s. for every half foot over 18 feet.

And 7s. extra for every half foot over 18 feet.

And 8s. extra for every half foot over 18 feet.

For conducting vessels from one station to another station within the Port:—

	s.	d.
Vessels under 100 tons	3	0
" over 100 tons and under 150....	4	0
" " 150 " " 200....	5	0
" " 250 " "	8	0

Neath, continued.

To or from the Mumbles:—		s.	d.
Vessels under 250 tons		4	0 extra.
„ over 250 „		7	0 „

Pilot Boats and Hobblers' Fees, 5s., which is included in the rates.

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first-mentioned ships shall, by any Order of Her Majesty's Most Honourable Privy Council, be privileged to enter the ports of this kingdom, upon paying the same duties of tonnage as are paid by British ships, in which case such ships and vessels not having British registers shall pay the like rates of Pilotage only as are payable by ships having British registers.

Pilot leading the way (if required by the master of the vessel following), entitled to half-pilotage as far as he shall lead.

Rates to Hobblers.

	s.	d.
Hobbler over the Bar, to or from the Layer or Giant's Grave, or the southern end of the Abbey Estate..	2	6 per vessel.
Hobbler over the Bar, to or from Fox's Coal Bank, or the Copper Works, or the Abbey Pill ..	3	0 „
Hobbler over the Bar, to or from Melincrythan Wharf or Neath Bridge ..	4	0 „
Hobbler employed in removing or assisting vessels within the Harbour ..	1	6 per tide.

Towage Rates and Regulations.**INWARDS.**

	Per ton register.
	s. d.
From the Outer Buoy to Layer or Giant's Grave..	0 1½
„ „ Abbey Coal or Crown Copper Works ..	0 1½
„ „ Mines Royal Copper Works ..	0 2
„ „ Neath ..	0 2½

OUTWARDS.

From Giant's Grave or the Layer to Sea or Outward Buoy	0 2
„ Abbey Coal or Crown Copper Works to Sea or Outward Buoy ..	0 2½
„ Abbey Pill or Mines Royal Copper Works to Sea or Outward Buoy ..	0 2½
„ Neath to Sea or Outward Buoy ..	0 2½

Vessels that may require to be towed shorter distances, if not having been offered the steamer to tow them the whole distance from where they were laden or going to load, to pay as under:—

From the Layer to Giant's Grave, and <i>vice versa</i> ..	0 0½
„ Abbey Coal or Crown Copper Works ..	0 1
„ Abbey Pill or Mines Royal Copper Works ..	0 1½
„ Neath ..	0 1½

Neath, continued.

	s.	d.
From Giant's Grave to Abbey Coal or Crown Copper Works	0	0½
„ Abbey Pill or Mines Royal Copper Works	0	1
„ Neath	0	1½
From Abbey Coal or Crown Copper Works to the Pill ..	0	0½
„ „ „ „ „ „ „ „	0	1
Light vessels towed from Swansea or Port Talbot to Giant's Grave	0	2
Light vessels towed from Neath Harbour to Swansea or Port Talbot	0	6
Loaded vessels towed to Swansea or Port Talbot (in addition to the rate of towage from the various Stations to the Outward Buoy)	0	3
Vessels from 150 tons register and upwards, for towage in or out, to or from Giant's Grave	0	2
All vessels not exceeding thirty tons register to pay 3s. 6d. for towage in or out, to or from Giant's Grave.		
Three shillings the lowest rate for any towage.		

NEWPORT.

Tonnage Rates.

Coastwise, $\frac{1}{4}$ d. per ton register. Foreign, $\frac{1}{3}$ d. per ton register.

Keelago.

One penny per ton taken on discharged, at the Wharves in the River.

Tonnage Rates—Docks.

Tonnage Rates—Docks.		a.	d.
INWARDS.—For every ship or other vessel which shall enter the said dock from any part of Great Britain, Ireland, the Isle of Man, or any part of the Islands of Guernsey, Jersey, Alderney, and Sark, per ton measurement	0	2	
For every other part of Europe, except places within the Straits of Gibraltar and round the North Cape, per ton measurement	0	5	
From any port or place in Europe round the North Cape, or any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa, per ton measurement	0	7	
From any port or place in British America, any port or place in the United States of America, or any port or place in any other part of the world, per ton measurement	0	10	
For every ship or other vessel, with a cargo, which shall enter the said dock, and depart therefrom, within three weeks from the day of entry, without breaking bulk, or which shall discharge, and afterwards take on board, and depart with the same cargo, within such period of three weeks, per ton measurement (exclusive of the dues under the name of "Rent," hereinafter mentioned)	0	6	

Newport, continued.

	s.	d.
For every ship or other vessel which shall have departed from the said dock with a cargo, or any part of such cargo laden therein, and shall re-enter the said dock, with the same cargo, or part of such cargo, per ton measurement (exclusive of the dues under the name of "Rent" hereinafter mentioned)	0	3
OUTWARDS.—For every ship or other vessel which shall depart from the said dock to any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney, and Sark, per ton measurement	0	2
To any other part of Europe, except places within the Straits of Gibraltar and round the North Cape, per ton measurement	0	5
To any port or place in Europe, round the North Cape, or any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa, per ton measurement	0	7
To any port or place in British America, any port or place in the United States of America, or any port or place in any other part of the world, per ton measurement	0	10
For every ship or other vessel which shall enter the said dock in ballast, or light, and depart therefrom in ballast, or light, per ton measurement (exclusive of the dues under the name of "Rent," hereinafter mentioned)	0	3

Police and Watchmen.

For all vessels entering or departing from the dock, at per week, or fractional part of a week	1	0
N.B.—Competent watchmen for the protection of vessels and property therein can be obtained on application at the dock-office; the charge for each watchman is per night	3	6

Rent Charges.

All ships and vessels entering the dock in ballast, and departing with cargoes, not exceeding 400 tons register measurement, to be allowed to remain at the rates before specified for a period of	2	weeks
Above 400 tons and not exceeding 700 tons register measurement	3	"
Above 700 tons register measurement	4	"
Vessels above 70 tons and not exceeding 700 tons register measurement entering with a cargo and going out with another	4	"
Vessels above 700 tons register measurement entering with a cargo and going out with another	5	"
Vessels above 70 tons register measurement entering with a cargo and going out without breaking bulk, or which shall discharge, and afterwards take on board and depart with the same cargo	3	"

Newport, continued.

Vessel under 70 tons register measurement, entering the dock without ballast.. .. 4 days

All ships and vessels which shall remain in the dock for any longer periods than those respectively above stated, shall be subject (in addition to the rates and dues before stated) to a rent-charge of, for the first week, or any portion of a week, per ton register measurement.. .. 0 0½

For the second week, or any portion of a week, per ton register measurement 0 1

For the third week, or any portion of a week, per ton register measurement 0 1½

For the fourth week, and every subsequent week, and for any portion of a week, per ton register measurement 0 2

N.B.—In estimating the dues contained in the foregoing schedule, every vessel of less than 20 tons register measurement shall be rated at 20 tons register measurement.

Use of Machinery for Shipping or Unshipping.

For every ton of coal 0 1½

For every ton of coke, culm, iron, cinders, iron ore, earth, or rubbish of any kind 0 2½

For every ton of metallic (not iron) ore 0 3

Whenever waggons containing any of the above articles are moved on the railway sidings by hydraulic power in connection with the shipping machines, a charge will be made at the rate per ton of 0 1

All articles, matters, or things not included in the above-mentioned, and excepting ballast, will be subject to special agreement and charges.

Persons (other than the crews of vessels in the dock), landing or embarking on the Dock Company's premises, will be subject to a charge per head of 0 1

Charges for Discharging and Removing Ballast.

For every ton of ballast that is in the hold within 15 feet abaft, and 15 feet before any hatchway 1 0

For every ton of ballast exceeding in the hold a greater distance than stated above, an additional sum of 0 2

An additional charge for working by night will be made at the rate of per ton 0 3

Rates of Pilotage.

The Limit of this Pilotage is that portion of the Bristol Channel which lies eastward of Lundy Island, up to, and includes Kingroad and the River Usk as far as the Caerleon Bridge. This Pilotage is not compulsory, but may be obtained over all or any portion of this district, at the discretion of the masters of vessels.

Newport, continued.

Every licensed Pilot employed in piloting vessels to or from the port of Newport, shall be paid the following Pilotage Rates, according to the registered tonnage of the vessel:—

FOR LADEN VESSELS.

		Newport to Mouth of River Usk.			Newport to the Holmes or Cardiff Roads.		
		£	s.	d.	£	s.	d.
If under 100 tons	.....	0	10	0	..	0	13 0
100 tons and under 200	....	0	15	0	..	1	0 0
200	„	300	0	17 6	..	1	10 0
300	„	400	1	2 6	..	1	15 0
400	„	500	1	5 0	..	2	1 0
500	„	600	1	6 0	..	2	3 0
600	„	800	1	8 0	..	2	8 0
800	„	1000	1	10 0	..	2	12 0
1000 tons and upwards	....	1	12	0	..	2	16 0

For all vessels actually engaged in the coasting trade of the United Kingdom, and vessels in ballast, the charges to be one-third less than the above.

FOR LADEN AND UNLADEN VESSELS.

		Limit No. 1.			Limit No. 2.			Limit No. 3.		
		£	s.	d.	£	s.	d.	£	s.	d.
If under 100 tons	....	1	0	6	1	10	6	1	18	0
100 tons and under 200		1	10	0	2	5	0	2	12	6
200	„	300	2	5 0	3	5	0	4	0	0
300	„	400	2	12 6	3	12	6	4	12	6
400	„	500	3	1 0	4	3	6	5	6	0
500	„	600	3	5 6	4	10	6	5	18	0
600	„	800	3	13 0	5	3	0	6	13	0
800	„	1000	4	2 0	5	17	0	7	17	0
1000 tons and upwards		4	11	0	6	11	0	8	16	0

LIMIT No. 1.—Between the Holmes or Cardiff Roads and Minehead or Kingroad, or any point east of Minehead and west of Kingroad.

LIMIT No. 2.—Between the Holmes or Cardiff Roads and Coombe, or any point west of Minehead or Nash Point, and east of Coombe.

LIMIT No. 3.—Between the Holmes or Cardiff Roads and Lundy Island, or any point west of Coombe.

Any Pilot who may be required to remain on board any ship or vessel for the convenience of the captain, owner, or agent, after he shall have discharged the duties for which he was engaged, shall be entitled to be paid ten shillings per day for every day he may be employed; and any Pilot who may be required to move any ship or vessel in the dock, harbour, or river, occupying only one tide, shall be entitled to be paid for every ship.

Newport, continued.

	s.	d.
Under 100 tons	4	0
100 and under 300	5	0
300 „ 500	7	6
500 „ 800	10	0
800 and upwards	12	6

Vessels wind-bound in the waters of the Newport District, and retaining the services of a Pilot, shall pay five shillings per diem.

Pilots taken on board of any vessel inward bound to the westward of Ilfracombe, shall be paid the same Pilotage rates as from Lundy Island; but if west of Nash Point or Minehead, and east of Ilfracombe, the same rates as from the Nash Point; if between the Nash Point and the Holmes, the same rates as from the Nash Point; and if between the Holmes and Kingroad, the same rates as from the Holmes.

In case any vessel shall be compelled to bear up and return from the westward from stress of weather or accident, the Pilot in charge shall be entitled to, and shall be paid one-third of the Pilotage charge in addition, according to the distance such ship or vessel may have reached before she shall have put back.

Every master, owner, or agent of any vessel employing a Pilot, shall, in addition to the foregoing charges, pay a clerk or collector's fee, as follows, viz. :—

	s.	d.
Vessels under 100 tons	0	6
100 and under 300	1	0
300 „ 500	1	6
500 „ 800	2	0
800 and upwards	2	6

PEMBREY.**Ballast Rates.**

Wheeling, 1d. per ton register.

Every man employed on board to be paid at the rate of three shillings per day.

Each vessel to pay extra for the use of the planks, barrows, and waggons, viz. :—

Not exceeding	50 tons register	s.	d.
„	100 „	1	0
„	150 „	1	6
„	200 „	2	0
„	300 „	2	6
„	350 „	3	0
„	400 „	3	6
„	400 „	4	0
Exceeding 400	„	4	6

The same charge extra for the use of the crane and tubs if required.

Pembrey, continued.

Harbour Dues,		s.	d.
For every ship, barge, boat, or other vessel, coming in or going out of the harbour, to load or unload, per ton	0	2	
For every ship, barge, boat, or other vessel, running into the harbour by stress of weather, and not unloading	0	1	
And for every such ship, barge, boat, or other vessel, running into the harbour by stress of weather, for shelter, and lying longer than seven days, the further sum per ton per day of..	0	0½	
For every ship, barge, boat, or other vessel, coming into the harbour to seek a freight, of whatever tonnage, the sum of..	1	0	

Stemming,		s.	d.
Vessels not exceeding 20 tons register	0	6	
" 50 "	1	0	
" 75 "	1	6	
" 100 "	2	0	
" Exceeding 100 "	2	6	

PENNARD.

Keelage, 4d. per ton register.

PORTHCAWL.**Tonnage Rates,**

Coastwise, 2d. per ton register. Foreign, 4d. per ton register.

Ballast,

For discharging the ballast of any ship, fourpence per ton shall be paid upon the registry tonnage of such ship, or such smaller sum per ton, as shall from time to time be fixed upon by the Harbour Master; but if any ship shall have under a cargo ballast not exceeding fifteen tons in quantity, then sixpence per ton, in quantity as aforesaid, or such smaller sum per ton as shall be fixed upon as aforesaid, shall be paid; but if it shall exceed fifteen tons, then the ship shall be considered as being in ballast, and pay fourpence per ton register.

Exceeding 15 tons, 4d. per ton register.

Any ship arriving in tow of a steamer, after having discharged her last cargo at a neighbouring port, shall pay 1s. per ton for discharging her ballast, if not exceeding 15 tons; if exceeding 15 tons, 4d. per ton register tonnage.

The charges are subject to modification on completion of the Floating Dock, and other improvements in progress at this harbour.

Depth of Water on the Cill of Half-tide Basin:—Neaps, 16 feet; Springs, 26 feet.

The gate at entrance of Half-tide Basin being in working order, vessels can now load afloat.

*Porthcawl, continued.***Pilotage.**

From any place between Sker or Nash Points, and inside the sands into the harbour, and out of the harbour, to every such place:—

	£	s.	d.
Per registry under 30 tons	0	4	0
30 and under 40 „	0	5	0
40 „ 50 „	0	6	6
50 „ 60 „	0	8	0
60 „ 75 „	0	10	0
75 „ 100 „	0	12	0
100 „ 125 „	0	15	0
125 „ 150 „	0	18	0
150 „ 175 „	1	2	0
175 „ 200 „	1	6	0
200 „ 225 „	1	10	0
225 tons and upwards	1	14	0

And for the use of the Pilot Boat, every ship using the same:—

	s.	d.
Per registry under 75 tons	1	0
75 tons and upwards	2	0

For transporting a ship in the harbour, and re-mooring her, or for mooring or unmooring a ship, 1s. 6d. for each pilot, and 9d. for each hobbler.

And if any master of a ship shall engage a pilot and hands to take his ship out of the harbour, and she is not ready to be taken out during that tide; or if, after having been moved for the purpose of being taken out, she does not proceed; 1s. 6d. for each Pilot, and 9d. for each hobbler or assistant.

PORT TALBOT.**Tonnage Rates.**

For every vessel laden 3d. per ton register.

For every vessel in ballast .. 2d. „

Pilotage.

		From Outer Buoy to destination, if in 1 tide of 3 hrs.			To Outer Buoy from berths, if in 1 tide of 3 hrs.					
		£	s.	d.	£	s.	d.			
Above 25 tons register and under	40	..	0	5	0	..	0	4	0	
40	„	50	..	0	6	0	..	0	5	0
50	„	60	..	0	7	0	..	0	6	0
60	„	70	..	0	8	0	..	0	6	10
70	„	80	..	0	9	0	..	0	7	8
80	„	90	..	0	10	0	..	0	8	6
90	„	100	..	0	12	0	..	0	9	10

Port Talbot, continued.

1870 Tonnage, continued.										
		£ s. d.			£ s. d.					
Above 100 tons register and under	120	..	0	14	0	..	0	11	6	
120	"	140	..	0	16	0	..	0	13	2
140	"	160	..	0	18	0	..	0	14	10
160	"	180	..	1	0	0	..	0	16	6
180	"	200	..	1	5	0	..	1	0	0
200	"	250	..	1	10	0	..	1	3	6
250	"	300	..	2	0	0	..	1	10	4
300	"	350	..	2	15	0	..	2	0	8
350	"	400	..	3	10	0	..	2	11	4

And for every additional 50 tons..... 0 5 0 .. 0 4 0

If inside the outer buoy, only one-half of the foregoing rates.

For transporting a vessel from one part of the harbour to another :
under 100 tons, 2s. 6d. ; above 100 tons, 5s.

The price paid to hobbler not to exceed 2s. for each hobble ; and
no hobbler shall charge two hobbles, unless occupied for more than
three successive hours.

For every hobbler engaged by the master, 1s. 6d. from sea into the
dock, and 2s. from sea to the wharf of her destination ; if required to
tow, 6d. additional to each hobbler ; if engaged only to the end of the
breakwater, half the above rates only to be charged.

Steam Tugs.*To or from the Outer Buoy.*

Register Tonnage.				Register Tonnage.					
	£	s.	d.		£	s.	d.		
20 tons and under	..	0	3	0	100 and under 120	..	0	17	0
20 and under 30	..	0	4	0	120	..	1	1	0
30	..	0	5	0	150	..	1	5	0
40	..	0	6	0	200	..	1	10	0
50	..	0	8	0	250	..	2	0	0
60	..	0	9	0	300	..	2	10	0
70	..	0	10	6	400	..	3	10	0
80	..	0	13	0	500	..	4	10	0
90	..	0	15	0	every additional 50 tons	0	5	0	

Stemming Fee, 1s.

For use of Harbour Company's Tow Rope :—

	s.	d.
Vessels under 50 tons register burthen.....	1	6
" of 50 tons and under 100	2	0
" 100 ..	3	0
" 200 ..	4	0
" 300 tons and upwards	5	0

Ballast.

Ballast, in the river, is free of charge ; in the dock, 3d. per ton.

For use of planks and barrows, for 10 tons and under, 2s. ; 10 tons
and under 20. 3s. 6d. ; and 1s. extra for every 10 tons additional.

For use of the Graving-bank :—On the hard, 1d. per ton register
per week ; on the blocks, 1½d. per ton register per week.

SAUNDERSFOOT.**Pilotage.**—For every 100 tons in and out, 10s.**Harbour Dues.**—2d. per ton register.**Pier Light and Signal.**

Each Vessel.	s.	d.	Each Vessel.	s.	d.
20 to 30 tons register....	0	3	70 to 100 tons register..	1	0
30 to 50 " 	0	6	100 to 150 " ..	1	6
50 to 70 " 	0	9	150 tons and upwards ..	2	0

Discharging Ballast.

For each man employed on board.... 1d. per ton register.

For wheeling 1d. "

Trimming.—2d. per ton.**SWANSEA.****Tonnage Rates.**

For every vessel bound from and to any port or place in the United Kingdom, or the Isle of Man,		s.	d.
under 150 tons.....	per ton	0	4
150 tons and under 250 tons	per ton	0	5½
250 tons and under 350 tons	per ton	0	7
350 tons and upwards.....	per ton	0	8½

For every vessel bound to or from any port or place in Europe, or any port or place within the Straits of Gibraltar, under 100 tons	per ton	0	4
100 tons and under 250 tons	per ton	0	6
250 tons and under 350 tons	per ton	0	7½
350 tons and upwards.....	per ton	0	9

For every vessel bound to or from any other port or place than above specified, under 150 tons	per ton	0	7½
150 tons and under 250 tons	per ton	0	9½
250 tons and under 350 tons	per ton	1	0
350 tons and upwards.....	per ton	1	3

And in respect of Vessels entering in Ballast, and departing with Cargoes, the following Rates:—

Vessels bound to ports in the United Kingdom, or the Isle of Man	per ton	s.	d.
		0	3
Vessels bound to any port in Europe, or within the Straits of Gibraltar, under 100 tons	per ton	0	3
100 tons and under 250 tons	per ton	0	5
250 tons and under 350 tons	per ton	0	6
350 tons and upwards	per ton	0	7
Vessels bound to any other ports, under 150 tons....	per ton	0	6
150 tons and under 250 tons	per ton	0	7
250 tons and under 350 tons	per ton	0	9
350 tons and upwards.....	per ton	0	11

Swansea, continued.

Vessels driven in by stress of weather, and remaining over four tides, half the above rates. Vessels remaining over thirty days, unless prevented by embargo or weather, 1d. per ton per week.

Ballast Rates.

Register Tonnage.	Rates per ton on the quantity discharged.			
	s.	d.	s.	d.
Under 100 tons	0	5	at New Cut ..	0 6 in Dock.
100 and under 150 tons	0	7	"	0 8 "
150 and under 200 tons	0	9	"	0 10 "
200 tons and upwards	0	11	"	1 0 "

Additional Charges.

	s.	d.	
Discharged from any vessel into another vessel....	0	9	per ton.
Discharged into Lighters	1	6	"
Loaded into any vessel.....	0	6	"
Loaded into any vessel and discharged therefrom..	1	6	"

Towage.*In or Out, exclusive of Harbour Towsages.*

	£	s.	d.		£	s.	d.
Under 50 tons	0	7	6	425 and under 450	3	15	0
50 and under 75	0	10	0	450 "	4	0	0
75 "	1	0	12	475 "	5	0	0
100 "	1	0	15	500 "	5	4	10
125 "	1	0	17	525 "	5	4	15
150 "	1	0	0	550 "	5	5	0
175 "	1	5	0	575 "	5	10	0
200 "	1	10	0	600 "	5	15	0
225 "	1	15	0	650 "	6	0	0
250 "	2	0	0	700 "	6	5	0
275 "	2	5	0	750 "	6	10	0
300 "	2	10	0	800 "	6	15	0
325 "	2	15	0	850 "	7	0	0
350 "	3	0	0	900 "	7	7	0
375 "	3	5	0	950 "			
400 "	3	10	0				

All vessels above 1000 tons, 2d. per ton, new measurement.

If more than one Tug is required, half the above rates will be charged for each additional Tug.

Cranage.*At Corporation Cranes, Public Quay.*

	s.	d.	
For every lift under 1 ton.....	0	3	per lift.
Not exceeding 2 tons	0	3	"
" 2 to 5 tons.....	0	6	"
Five tons and upwards.....	2	0	"

*Swansea, continued.***Charges for Use of Five and Ten Ton Cranes,***Belonging to the Harbour Trustees.*

	£	s.	d.		£	s.	d.
Under 1 ton ..	0	0	3	5 and under 6..	0	7	6
1 and under 2..	0	0	6	6 ..	0	10	0
2 ..	3..	0	1	7 ..	0	12	6
3 ..	4..	0	3	8 ..	0	15	0
4 ..	5..	0	4	9 ..	1	0	0

No lift to exceed ten tons.

Pilotage.

Register Tonnage.	Inwards.	Outwards.	Total.
	£ s. d.	£ s. d.	£ s. d.
Vessels 50 tons and under 75	0 10 0	0 6 0	0 16 0
Vessels 75 tons and under 100	0 11 0	0 7 0	0 18 0
Vessels 100 tons and under 125	0 12 0	0 8 0	1 0 0
Vessels 125 tons and under 150	0 14 0	0 8 0	1 2 0
Vessels 150 tons and under 175	0 17 0	0 8 0	1 5 0
Vessels 175 tons and under 200	0 19 0	0 8 0	1 7 0
Vessels 200 tons and under 250	1 6 0	0 10 0	1 16 0
Vessels 250 tons and under 300	1 12 0	0 12 0	2 4 0
Vessels 300 tons and under 350	2 3 0	0 14 6	2 17 6
Vessels 350 tons and under 400	2 10 0	0 17 0	3 7 0
Vessels 400 tons and under 450	2 17 6	1 2 0	3 19 6
Vessels 450 tons and under 500	3 5 0	1 7 0	4 12 0
Vessels 500 tons and under 550	3 10 0	1 12 0	5 2 0
Vessels 550 tons and under 600	3 15 0	1 17 0	5 12 0
Vessels 600 tons and under 650	4 0 0	2 2 0	6 2 0
Vessels 650 tons and under 700	4 5 0	2 7 0	6 12 0
Vessels 700 tons and under 750	4 10 0	2 12 0	7 2 0
Vessels 750 tons and under 800	4 15 0	2 17 0	7 12 0
Vessels 800 tons and under 850	5 0 0	3 2 0	8 2 0
Vessels 850 tons and under 900	5 5 0	3 7 0	8 12 0
Vessels 900 tons and under 950	5 10 0	3 12 0	9 2 0
Vessels 950 tons and under 1000	5 15 0	3 17 0	9 12 0

Together with an additional sum of 5s. in respect of every 50 tons above 950 tons on the Inward Pilotage; and an additional sum of 5s. in respect of every 50 tons above 950 tons on the Outward Pilotage.

Pilots will take vessels over 500 tons register, Outward Bound, clear of the Green Grounds, or to the Mumbles Roads; and the above charge includes landing the Pilot, in all cases.

Swansea, continued.

Vessels of 200 tons and upwards, if boarded beyond the following bearings, shall pay an additional Pilotage, as under :—

	W. of Pwllty Point, bearing N.N.E.		W. of Oxwich Point bearing N.N.E.S. of Sker Buoy, bearing N.N.E. or W.S.W.		W. of Worm's Head, bearing N.N.E.	
	s.	d.	s.	d.	£	s. d.
200 tons and under 300 ..	4	0	5	0	0	6 0
300 tons and under 400 ..	5	6	7	6	0	10 0
400 tons and under 500 ..	7	6	10	0	0	15 0
500 tons and under 600 ..	10	0	12	6	1	0 0
600 tons and under 700 ..	12	6	15	0	1	5 0
700 tons and upwards ..	15	0	18	6	1	10 0

One-half of the above Rates only to be paid and payable to every Pilot navigating or assisting any vessel (not entering Swansea Harbour) within any part of Swansea Bay, or within the limits of the Pilotage Ground hereinafter mentioned.

N.B.—Pilotage not compulsory upon vessels under 100 tons register, when entering or leaving Swansea Harbour in ballast; but if any Pilotage be required, only a licensed Pilot to be employed, and the above rates to be paid.

OPTIONAL PILOTAGE.—Masters of vessels under 500 tons register, requiring Pilots to take their vessels to the Mumbles Roads, or clear of the Green Grounds, to pay, in addition to the Outward Pilotage Rates, the following additional Rates, including landing :—

	s.	d.
Vessels under 100 tons	4	0
Vessels 100 tons and under 200	5	6
Vessels 200 tons and under 300	7	6
Vessels 300 tons and under 400	9	6
Vessels 400 tons and under 500	11	0

Masters of vessels requiring Pilots to take their vessels to the Eastern or Western Limits, to pay, in addition to the Outward Rates, the following additional rates, including landing :—

	£	s.	d.
Vessels 300 tons and under 500	3	0	0
Vessels 500 tons and under 700	4	0	0
Vessels 700 tons and under 900	5	0	0
Vessels 900 tons and upwards	6	0	0

The following shall be deemed to be the limits of the Pilotage Ground of Pilots appointed and licensed by the Swansea Harbour Trustees, viz. :—"North of the line of the Nash Lights in one;" and "east of an imaginary line running north and south of a point, four miles westward of the Helwick light vessel, placed off the Helwick Shoal, near the Worm's Head, in the county of Glamorgan."

Swansea, continued.

Every Pilot required to remain on board a vessel, whether inward or outward bound, to be paid by the Master of such vessel, at the rate of 4s. for every twelve hours, or broken portion of twelve hours, in which such Pilot shall not have earned pilotage or distance-money, in the same vessel.

Harbour Pilotage.

	s.	d.
Vessels under 10 tons.....	2	6
Vessels 100 tons and under 200.....	3	6
Vessels 200 tons and under 400.....	5	0
Vessels 400 tons and under 500.....	7	6
Vessels 500 tons and upwards	12	0

If the Master of any vessel shall require any Pilot to go on board and take his vessel out of the Harbour, transport or move her, and such vessel be not ready to be taken out or moved, half the rates last mentioned shall be paid to the Pilot.

Masters of vessels requiring Hobblers or Boats, to assist in removing vessels within the Harbour, shall pay each Hobbler employed, 2s., and for each Boat, 2s.

TENBY.**Tonnage Rates.**

Vessels discharging	3d.	per ton register.
Vessels wind bound	1½d.	„
Yachts	2d.	„ or 6d. per ton yearly.
Trawlers	2d.	„ or 40s. yearly.

Pilot Boats exempt.

WATCHET.

Harbour Dues.—One halfpenny per ton registered tonnage.

VALUE IN BRITISH CURRENCY OF THE MONEYS OF ALL NATIONS.

AMERICA, U.S.	£	s.	d.
Eagle	2	1	0
Half Eagle	1	0	6
Dollar	0	4	2

AUSTRIA.

Ducat.....	0	9	4
Silver Florin.....	0	2	0
Dollar.....	0	4	0
Zwanzigr, 20 Kreutzers ...	0	0	8

BREMEN.

	£	s.	d.
Louis d'or	0	16	0
Gold Rigabank Dollar	0	3	4
36 Gros Piece	0	4	2

BELGIUM.

Gold Leopold	0	19	10
— 10 Franc Piece	0	7	10
Silver 5 Franc.....	0	3	17
— 1 Franc.....	0	0	9½

BRAZILS.

	£	s.	d.
Gold Piece, 6400 Reis	1	15	9
— 4000 —	1	0	0
Silver ditto, 1200 —	0	4	2
— 960 —	0	4	1
— 640 —	0	2	9
— 320 —	0	1	4
— 200 —	0	0	8

DENMARK.

Christian d'or	0	16	8
Silver Species	0	4	4
Rigsbank Daler	0	2	2
Mark	0	0	4½

EGYPT.

Gold New Sequin	0	10	4
Silver New Piastre	0	3	4
— Grush	0	1	2

EAST INDIES.

Gold Mohur	1	9	0
Sicca Rupee	0	1	10½

FRANCE.

Gold Napoleon	0	16	0
Silver 5-Franc Piece	0	4	0
— Franc	0	0	9½

GREECE.

40-Drachmi Gold Piece	1	10	6
Five ditto	0	3	9
1 Drachmi, 100 Leplas	0	0	8½

GERMANY.

Gold Louis d'or	0	16	1
— Ducat	0	9	3
Silver Crown	0	4	4
Florin	0	1	8

HOLLAND.

Gold 10-Florin Piece	0	16	6
— Ducat	0	9	3
Silver Florin or Guilder	0	1	8

HAMBURG and LUBEC.

Ducat	0	9	3
Dollar	0	4	4
Mark	0	1	2½

HANOVER, BRUNSWICK, &c.

Gold George d'or Double	1	12	4
Ditto, Single	0	16	2
Thaler, 30 Groschen	0	2	11

MEXICO.

Gold Doubloon	3	5	0
— Half ditto	1	12	6
— Quarter ditto	0	16	3
— Sixteenth ditto	0	4	0
Silver Dollar	0	4	2
— Half ditto	0	2	1
— Quarter ditto	0	1	0½
— Eighth ditto	0	0	6½

NAPLES.

	£	s.	d.
Gold Piece of 30 Ducats	5	0	0
Silver Ducat	0	3	4
— Dollar	0	4	0

NORWAY.

Spanish Dollar	0	4	4
Rigsbank Dollar	0	2	2
Mark	0	0	9½

POLAND.

Gold Ducat	0	9	0
Rix Dollar	0	4	0
Florin	0	0	5½

PORTUGAL.

Gold Joaze, 1000 Reis	1	16	0
Silver Crown, 100 Reis	0	4	8
— Crusado 400 Reis	0	2	3

PRUSSIA.

Gold Frederick	0	16	9
Silver Thaler	0	3	0
Silbergroschen	0	0	1½

ROME.

Gold 10-Scudi Piece	2	2	6
Silver Scudo, 10 Paoli	0	4	2
Paoli, 10 Bajochi	0	0	5

RUSSIA.

Gold Half Imperial	0	16	3
Ducat	0	9	2
Silver Rouble	0	3	2

SAXONY.

August d'or	0	16	2
Thaler Specie	0	3	11
— Currency	0	3	0

SPAIN.

Gold Doubloon	3	6	6
— Pistole	0	16	6
Silver Dollar	0	4	3

SWEDEN.

Gold Ducat	0	9	2
Silver Species	0	4	4
— Half Species	0	2	2
Rix Dollar Banco, 48 Sk.	0	1	8

SWITZERLAND.

Gold Double Pistole	1	17	0
Four-Franc Piece	0	4	8
1-Franc do., 10 Batzen	0	1	1½

TURKEY.

Gold New Double Sequin	1	16	0
— Sequin	0	18	0
Spanish Dollar	0	4	2
Piastre, 40 Paras	0	0	2½

TIDAL CONSTANTS.

By the following Table, the time of High Water may be found in *Local Mean Time*, for any day of the year, by adding to or subtracting from the various Ports of reference.

GREAT BRITAIN.

West Coast, &c.				East Coast, &c.			
		H. M.				H. M.	
St. Ives	sub. 1	48	From Milford Haven.	Inverness	sub. 1	49	To or from London.
Newquay	sub. 1	28		Aberdeen	sub. 1	7	
Padstow	sub. 1	19		Dundee	add 0	25	
Bosccastle	sub. 1	17		Perth	add 1	28	
Budehaven.. ..	sub. 0	58		Leith	add 0	10	
Lundy Island ..	sub. 1	17		Berwick	add 0	11	
Barnstaple Bridge	add 0	41		Blyth	add 1	8	
Appledore	add 0	11		Tynemouth Bar ..	add 1	13	
Bideford	add 0	20		North Shields ..	add 1	16	
Minehead	sub. 1	12		Newcastle	add 2	16	
Bridgewater Bar..	sub. 0	52	From Bristol.	Sunderland	add 1	15	To or from London.
Weston-super-Mare	sub. 0	48		Seaham	add 1	17	
Flatholm Island..	sub. 0	48		Hartlepool	add 1	21	
Portishead	sub. 0	15		Whitby	add 1	38	
Kingroad	sub. 0	35		Scarborough	add 2	4	
Chepstow	sub. 0	1		Flamborough Head	add 2	23	
Carmarthen Bar..	sub. 0	22		Great Grimsby ..	add 3	29	
Tenby	sub. 0	32		Hull	add 4	19	
St. Ann's Lighthouse	sub. 0	36		Goole	add 5	37	
Fishguard	add 0	24		Lynn	add 3	53	
Cardigan	add 0	29	To or from Liverpool.	Yarmouth Road..	sub. 4	52	To Milford Haven.
Newquay	add 0	53		Lowestoft	sub. 4	10	
Aberystwith	add 0	59		Orfordness	sub. 2	52	
Aberdovey	add 1	28		Margate	sub. 2	27	
Port Madoc	add 0	58		Nore	sub. 1	37	
Caernarvon.. ..	sub. 2	2		Chatham	sub. 1	5	
Holyhead	sub. 1	24		Gravesend	sub. 0	57	
Amlwch	sub. 1	5		Woolwich	sub. 0	30	
Beaumaris	sub. 1	3		London Docks ..	sub. 0	10	
Chester	sub. 1	5					
Fleetwood	sub. 0	23	To or from Liverpool.				
Whitehaven	sub. 0	21					
Douglas, I. of Man	sub. 0	23					
Ramsey	sub. 0	23					
Peel	sub. 0	27					
Kircudbright ..	sub. 0	25					
Ardrossan	add 0	10					
Glasgow	add 1	50					

South Coast.

Ramsgate	add 5	12	To Milford Haven.
Deal	add 4	43	
Folkestone	add 4	35	
Hastings	add 4	21	
Beachy Head ..	add 4	48	
Shoreham	add 5	2	

Tidal Constants, continued.

	H. M.		H. M.
Arundel Bar ..	add 5 3	Lyme Regis ..	sub. 0 11
Littlehampton ..	add 5 4	Exmouth ..	sub. 0 11
Chichester ..	add 4 58	Torbay ..	sub. 0 32
Bembridge Point	add 4 28	Teignmouth ..	sub. 0 32
Portsmouth ..	add 5 9	Dartmouth ..	sub. 0 16
Southampton ..	add 3 58	Devonport ..	sub. 0 49
West Cowes ..	add 4 13	Plymouth Break.	sub. 0 55
Yarmouth ..	add 3 28	Fowey ..	sub. 1 18
Needles Point ..	add 3 14	Mevagizey ..	sub. 1 28
Christchurch ..	add 2 28	Falmouth ..	sub. 1 35
Poole ..	add 2 38	Lizard ..	sub. 1 32
Portland ..	add 0 29	Penzance ..	sub. 2 2
Bridport ..	sub. 0 27	Scilly I. (St. Mary)	sub. 2 5

IRELAND.

Skull ..	sub. 2 30	Tor Point ..	sub. 1 55
Crookhaven ..	sub. 2 23	Lough Lorne ..	sub. 0 47
Dunmanus Harb.	sub. 2 35	Belfast ..	sub. 0 52
Dunbeacon ..	sub. 2 41	Donaghadee ..	sub. 0 22
Black Ball Harb.	sub. 2 52	Lough Strangford.	sub. 0 42
Castletown ..	sub. 2 18	Warren Point ..	sub. 0 25
Bantry Harbour..	sub. 2 45	Carlingford Bar..	sub. 0 55
West Cove ..	sub. 2 40	Howth Harbour..	sub. 0 26
Valentia Harbour.	sub. 2 50	Dublin Bar ..	sub. 0 23
Kilbaha ..	sub. 2 16	Kingstown ..	sub. 0 25
Kilrush ..	sub. 1 50	Wicklow ..	sub. 1 6
Carrigaholt..	sub. 1 48	Arklow ..	sub. 2 50
Tarbert ..	sub. 1 35	Wexford ..	add 0 49
Foyne's Island ..	sub. 0 57	New Ross ..	sub. 0 28
Mellon ..	sub. 0 31	Waterford (bridge)	sub. 0 26
Limerick ..	sub. 0 16	Do. (Duncan fort)	sub. 1 12
Galway ..	sub. 1 57	Dunmore ..	sub. 1 50
Roundstone ..	sub. 2 4	Ballinacourty, Dun-	
Achillbeg ..	sub. 1 18	garven ..	sub. 1 20
Broadhaven Harb.	sub. 1 32	Youghal ..	sub. 1 18
Westport ..	sub. 1 35	Ballycottin..	sub. 1 38
Sligo Bay ..	sub. 1 14	Cork ..	sub. 1 34
Donegal Harbour.	sub. 1 14	Queenstown ..	sub. 1 31
Killibegs ..	sub. 1 16	Kinsale ..	sub. 1 49
Lough Rossmore.	sub. 1 12	Courtmaeskerry..	sub. 1 56
Sheephaven ..	sub. 1 0	Castletownsend ..	sub. 2 11
Londonderry ..	add 1 29	Baltimore ..	sub. 2 9
Coleraine ..	sub. 0 8	Cape Clear ..	sub. 2 32

Tidal Constants, continued.

FOREIGN AND COLONIAL.

		M.	M.				M.	M.
Adelaide, port, Aus.	sub.	0	48		Ichabo	sub.	5	32
Aden, Arabia ..	add	3	13		Jackson, Port ..	add	1	43
Auckland	add	0	33		Jersey, St. Hellier	sub.	4	7
Bayonne Bar. Fr.	sub.	2	47		Malaga	add	5	28
Bilboa, Spain ..	sub.	3	32		Malo, St.	sub.	0	27
Bombay	add	5	8		Melbourne	sub.	5	12
Bordeaux	add	0	18		Moreton Bay ..	add	2	28
Boston, U.S. ..	add	4	55		Natal, Port	sub.	2	2
Botany Bay	add	1	43		Nelson, New Zea.	add	3	18
Boulogne	add	4	53		New York	add	1	41
Brest	sub.	2	45	To or from Milford Haven.	Oporto	sub.	4	2
Buenos Ayres ..	add	5	28		Ostend	add	5	53
Cadiz, Spain ..	sub.	4	47		Pernambuco ..	sub.	2	9
Calais	add	5	17		Philadelphia ..	sub.	5	14
Calcutta	sub.	4	2		Philip, Port, ent.	sub.	5	2
Callao Bay	sub.	0	45		Portland, U.S. ..	add	4	53
Canton River, ent.	add	3	28		Quebec	add	0	6
Charlestown, U.S.	add	0	41		Richmond, U.S..	sub.	2	4
Cherbourg	add	1	17		Rio Janeiro ..	sub.	3	32
Copiapo	add	1	58		Rochelle	sub.	3	1
Coquimbo	add	2	36		Royal, Port	add	4	28
Delaware, U.S. ..	add	1	28		Rotterdam	sub.	2	47
Dieppe	add	4	34		Rouen	sub.	4	4
Francisco, San ..	add	4	2		Savannah, City ..	add	1	41
Galle, Point de ..	sub.	4	32		Senegal	add	3	58
Gambia River ..	add	1	38		Singapore	add	3	13
Geelong	sub.	3	42		Suez Bay	sub.	4	32
Gibraltar	sub.	4	12		Sydney, Australia	add	2	6
Guernsey, St. Peter	add	0	16		Table Bay	sub.	3	52
Hamburg	sub.	1	3		Tangier	sub.	4	50
Hong Kong	add	3	43		Ushant	sub.	3	0
Horn, Cape	sub.	2	22		Valparaiso	add	3	0

MOON'S RISING AND SETTING.

At four days old it sets at, and shines till, about 10 at night.	16 at a quarter after.....	7
5 about 11	17 at half after	8
6 about 12	18 about	10
7 at near 1 in the morning.	19 about	11
14 at full it rises about 6 in the evening.	20 about	12

THE
BRISTOL CHANNEL
ALMANACK
AND
TIDE TABLES;
TOGETHER WITH
PILOTAGE REGULATIONS,
PORT CHARGES,
ASTRONOMICAL TABLES,
&c., &c.,
FOR THE YEAR
1869.

ENTERED AT STATIONERS' HALL.

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NOTICE.

The Port Charges, and other information, have been collected with as much care as circumstances would permit, but should any errors or omissions be discovered, the Publishers will be glad to have them pointed out, that they may be corrected in future years; and any suggestions for the improvement of the work will also be gladly received, as it is their desire to make it in every respect as accurate and complete as possible.

The work comprises:—

Calendar and Astronomical Tables ...pages	4 to 15
Tide Tables	pages 18 to 65
Port Charges, &c.	pages 66 to 103
Tidal Constants	pages 103 to 106

Swansea, Nov., 1868.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.	Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S				Equation of Time.	Diff. for 1 hour
				Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter. ‡		
		h m	m s	h m s	° ' "	"	"	m s	s
1	Fri	15 24.8	1 11	18 48 40	22 58 57 S	12.83	16 18	3 58	1.174
2	Sat	16 19.4	1 11	18 53 5	22 53 36	13.98	16 18	4 26	1.160
3	Sun	17 11.5	1 10	18 57 29	22 47 47	15.12	16 18	4 54	1.144
4	Mon	18 1.9	1 10	19 1 53	22 41 31	16.24	16 18	5 21	1.128
5	Tue	18 51.5	1 10	19 6 16	22 34 47	17.36	16 18	5 48	1.111
6	Wed	19 40.9	1 10	19 10 39	22 27 38	18.48	16 18	6 14	1.093
7	Thu	20 30.7	1 10	19 15 22	22 20 1	19.58	16 18	6 40	1.073
8	Fri	21 21.1	1 10	19 19 24	22 11 58	20.67	16 18	7 6	1.052
9	Sat	22 12.1	1 10	19 23 45	22 3 29	21.76	16 18	7 31	1.030
10	Sun	23 3.0	1 10	19 28 6	21 54 35	22.83	16 18	7 55	1.007
11	Mon	23 53.3	1 10	19 32 27	21 45 14	23.89	16 18	8 19	0.982
12	Tue	conjunc	1 10	19 36 47	21 35 28	24.94	16 18	8 42	0.956
13	Wed	0 42.4	1 10	19 41 6	21 25 18	25.98	16 18	9 5	0.930
14	Thu	1 29.8	1 10	19 45 24	21 14 42	27.00	16 18	9 27	0.902
15	Fri	2 15.4	1 10	19 49 42	21 3 42	28.01	16 18	9 48	0.873
16	Sat	2 59.2	1 9	19 53 59	20 52 18	29.01	16 18	10 9	0.844
17	Sun	3 41.9	1 9	19 58 16	20 40 30	30.00	16 17	10 29	0.814
18	Mon	4 24.0	1 9	20 2 3	20 28 19	30.97	16 17	10 48	0.783
19	Tue	5 6.2	1 9	20 6 47	20 15 44	31.93	16 17	11 7	0.752
20	Wed	5 49.4	1 9	20 11 1	20 2 47	32.87	16 17	11 24	0.719
21	Thu	6 34.5	1 9	20 15 14	19 49 27	33.80	16 17	11 41	0.686
22	Fri	7 22.3	1 9	20 19 27	19 35 45	34.71	16 17	11 57	0.654
23	Sat	8 13.6	1 9	20 23 39	19 21 42	35.61	16 17	12 12	0.620
24	Sun	9 8.6	1 9	20 27 50	19 7 17	36.49	16 17	12 27	0.586
25	Mon	10 7.0	1 9	20 32 0	18 52 31	37.35	16 17	12 41	0.552
26	Tue	11 7.7	1 8	20 36 9	18 37 24	38.21	16 17	12 53	0.518
27	Wed	12 9.0	1 8	20 40 18	18 21 58	39.04	16 16	13 5	0.484
28	Thu	13 9.2	1 8	20 44 26	18 6 11	39.86	16 16	13 17	0.450
29	Fri	14 7.2	1 8	20 48 33	17 50 5	40.66	16 16	13 27	0.416
30	Sat	15 2.6	1 8	20 52 39	17 33 40	41.45	16 16	13 37	0.382
31	Sun	15 55.7	1 8	20 56 44	17 16 56	42.22	16 16	13 45	0.348

* Mean Time may be found by subtracting 0^s.19 from the *Sideral*.

‡ The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southings or Meridian Passage.	Moon's Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S							Equation of Time.	Diff. for 1 hour
				Apparent Right Ascension.	Apparent Declination.			Diff. for 1 hour	Semi- diam- eter.†			
		h m	m s	h m s	° ' "	" ' "	" ' "	" ' "	m s	s		
1	Mon	16 47.2	1 8 21	0 49	16 59 54 S	42.97	16 16	13 53	0.315			
2	Tue	17 37.8	1 8 21	4 52	16 42 34	43.71	16 16	14 1	0.282			
3	Wed	18 28.1	1 7 21	8 55	16 24 57	44.43	16 15	14 7	0.249			
4	Thu	19 18.5	1 7 21	12 57	16 7 2	45.13	16 15	14 13	0.215			
5	Fri	20 9.0	1 7 21	16 59	15 48 51	45.82	16 15	14 17	0.182			
6	Sat	20 59.5	1 7 21	20 59	15 30 23	46.49	16 15	14 21	0.150			
7	Sun	21 49.5	1 7 21	24 59	15 11 40	47.14	16 15	14 25	0.117			
8	Mon	22 38.5	1 7 21	28 58	14 52 41	47.78	16 15	14 27	0.084			
9	Tue	23 26.2	1 7 21	32 56	14 33 27	48.39	16 14	14 29	0.052			
10	Wed	conjunc	1 7 21	36 54	14 13 58	48.99	16 14	14 29	0.019			
11	Thu	0 12.2	1 7 21	40 50	13 54 15	49.57	16 14	14 30	0.013			
12	Fri	0 56.6	1 6 21	44 46	13 34 19	50.13	16 14	14 29	0.045	Subtract from Mean Time.		
13	Sat	1 39.7	1 6 21	48 41	13 14 9	50.68	16 14	14 27	0.077			
14	Sun	2 21.9	1 6 21	52 36	12 53 47	51.20	16 13	14 25	0.108			
15	Mon	3 3.9	1 6 21	56 29	12 33 12	51.71	16 13	14 22	0.139			
16	Tue	3 46.2	1 6 22	0 22	12 12 25	52.20	16 13	14 19	0.169			
17	Wed	4 29.8	1 6 22	4 14	11 51 26	52.68	16 13	14 14	0.198			
18	Thu	5 15.4	1 6 22	8 6	11 30 16	53.14	16 13	14 9	0.228			
19	Fri	6 3.6	1 6 22	11 56	11 8 55	53.58	16 12	14 3	0.257			
20	Sat	6 55.1	1 6 22	15 46	10 47 24	54.00	16 12	13 57	0.285			
21	Sun	7 50.0	1 6 22	19 36	10 25 44	54.40	16 12	13 50	0.313			
22	Mon	8 47.8	1 5 22	23 25	10 3 53	54.79	16 12	13 42	0.340			
23	Tue	9 47.6	1 5 22	27 13	9 41 54	55.16	16 12	13 33	0.366			
24	Wed	10 47.8	1 5 22	31 0	9 19 45	55.51	16 11	13 24	0.392			
25	Thu	11 47.3	1 5 22	34 47	8 57 29	55.85	16 11	13 14	0.416			
26	Fri	12 45.1	1 5 22	38 33	8 35 5	56.17	16 11	13 4	0.440			
27	Sat	13 41.0	1 5 22	42 19	8 12 33	56.48	16 11	12 53	0.463			
28	Sun	14 35.3	1 5 22	46 4	7 49 54	56.77	16 10	12 42	0.485			

* Mean Time may be found by subtracting 0s.19 from the *Sidereal*.† The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southings or Meridian Passage.		Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S								Equation of Time.	Diff. for 1 hour	
					Apparent Right Ascension.		Apparent Declination.		Diff. for 1 hour		Semi- diam- eter.§				
h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s
1	Mon	15	28.4	1	5	22 49 49	7	27	8 S	57.04	16	10	12	30	0.506
2	Tue	16	20.8	1	5	22 53 33	7	4	15	57.30	16	10	12	18	0.525
3	Wed	17	12.9	1	5	22 57 17	6	41	17	57.55	16	10	12	5	0.544
4	Thu	18	4.6	1	5	23 1 0	6	18	13	57.78	16	9	11	51	0.563
5	Fri	18	55.9	1	5	23 4 43	5	55	3	58.00	16	9	11	38	0.580
6	Sat	19	46.4	1	5	23 8 25	5	31	49	58.18	16	9	11	24	0.596
7	Sun	20	35.8	1	5	23 12 7	5	8	30	58.36	16	9	11	9	0.612
8	Mon	21	23.7	1	4	23 15 49	4	45	7	58.53	16	8	10	54	0.627
9	Tue	22	10.0	1	4	23 19 30	4	21	40	58.67	16	8	10	39	0.642
10	Wed	22	54.7	1	4	23 23 11	3	58	10	58.81	16	8	10	24	0.656
11	Thu	23	38.1	1	4	23 26 52	3	34	37	58.92	16	7	10	8	0.669
12	Fri	conjunc		1	4	23 30 32	3	11	2	59.02	16	7	9	51	0.681
13	Sat	0	20.6	1	4	23 34 12	2	47	24	59.10	16	7	9	35	0.693
14	Sun	1	2.7	1	4	23 37 52	2	23	44	59.16	16	7	9	18	0.704
15	Mon	1	45.0	1	4	23 41 32	2	0	3	59.22	16	6	9	1	0.714
16	Tue	2	28.2	1	4	23 45 11	1	36	21	59.25	16	6	8	44	0.723
17	Wed	3	12.8	1	4	23 48 50	1	12	39	59.27	16	6	8	26	0.732
18	Thu	3	59.6	1	4	23 52 29	0	48	56	59.27	16	6	8	9	0.740
19	Fri	4	49.0	1	4	23 56 8	0	25	13	59.26	16	5	7	51	0.746
20	Sat	5	41.1	1	4	23 59 46	0	1	31 S	59.23	16	5	7	33	0.753
21	Sun	6	35.9	1	4	0 3 24	0	22	10 N	59.19	16	5	7	15	0.759
22	Mon	7	32.8	1	4	0 7 3	0	45	50	59.13	16	4	6	56	0.764
23	Tue	8	30.7	1	4	0 10 41	1	9	28	59.05	16	4	6	38	0.767
24	Wed	9	28.8	1	4	0 14 19	1	33	5	58.96	16	4	6	20	0.770
25	Thu	10	26.1	1	4	0 17 57	1	56	39	58.86	16	4	6	1	0.772
26	Fri	11	22.4	1	4	0 21 35	2	20	11	58.74	16	3	5	43	0.774
27	Sat	12	17.7	1	4	0 25 13	2	43	39	58.61	16	3	5	24	0.774
28	Sun	13	12.3	1	4	0 28 51	3	7	5	58.46	16	3	5	5	0.773
29	Mon	14	6.5	1	4	0 32 29	3	30	26	58.31	16	3	4	47	0.770
30	Tue	15	0.6	1	4	0 36 7	3	53	44	58.14	16	2	4	28	0.767
31	Wed	15	54.4	1	4	0 39 45	4	16	57 N	57.95	16	2	4	10	0.763

Mean Time may be found by subtracting 0s.18 from the Sidereal.

‡ The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.		Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S								Equation of Time.	Diff. for 1 hour				
					Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter.‡										
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s	
1	Thu	16	47·8	1	4	0	43	24	4	40	6	N	57·75	16	2	3	52	0·757
2	Fri	17	40·2	1	4	0	47	2	5	3	10		57·54	16	1	3	34	0·751
3	Sat	18	31·0	1	4	0	50	41	5	26	9		57·32	16	1	3	16	0·745
4	Sun	19	20·1	1	4	0	54	19	5	49	2		57·07	16	1	2	58	0·738
5	Mon	20	7·2	1	4	0	57	58	6	11	49		56·81	16	1	2	40	0·730
6	Tue	20	52·5	1	4	1	1	37	6	34	30		56·55	16	0	2	23	0·721
7	Wed	21	36·2	1	4	1	5	17	6	57	4		56·26	16	0	2	6	0·711
8	Thu	22	18·9	1	4	1	8	56	7	19	31		55·96	16	0	1	49	0·701
9	Fri	23	1·1	1	4	1	12	36	7	41	50		55·65	15	59	1	32	0·690
10	Sat	23	43·4	1	4	1	16	16	8	4	3		55·33	15	59	1	16	0·679
11	Sun	conjunc		1	4	1	19	57	8	26	7		54·98	15	59	0	59	0·667
12	Mon	0	26·5	1	4	1	23	38	8	48	2		54·62	15	59	0	44	0·654
13	Tue	1	11·0	1	4	1	27	19	9	9	49		54·25	15	58	0	28	0·641
14	Wed	1	57·4	1	4	1	31	0	9	31	26		53·86	15	58	0	13	0·627
15	Thu	2	46·2	1	4	1	34	42	9	52	55		53·46	15	58	0	2	0·613
16	Fri	3	37·4	1	5	1	38	24	10	14	13		53·04	15	58	0	17	0·598
17	Sat	4	31·0	1	5	1	42	6	10	35	21		52·61	15	57	0	31	0·583
18	Sun	5	26·2	1	5	1	45	49	10	56	19		52·17	15	57	0	45	0·567
19	Mon	6	22·3	1	5	1	49	32	11	17	6		51·71	15	57	0	58	0·551
20	Tue	7	18·4	1	5	1	53	15	11	37	41		51·24	15	57	1	11	0·535
21	Wed	8	13·9	1	5	1	56	59	11	58	5		50·75	15	56	1	24	0·518
22	Thu	9	8·5	1	5	2	0	44	12	18	17		50·24	15	56	1	36	0·500
23	Fri	10	2·6	1	5	2	4	28	12	38	17		49·73	15	56	1	48	0·481
24	Sat	10	56·3	1	5	2	8	14	12	58	5		49·20	15	56	1	59	0·462
25	Sun	11	50·2	1	5	2	11	59	13	17	39		48·66	15	55	2	10	0·442
26	Mon	12	44·5	1	5	2	15	45	13	37	1		48·11	15	55	2	20	0·422
27	Tue	13	39·4	1	5	2	19	32	13	56	9		47·54	15	55	2	30	0·400
28	Wed	14	34·4	1	5	2	28	19	14	15	3		46·97	15	55	2	39	0·378
29	Thu	15	28·8	1	5	2	27	7	14	33	43		46·38	15	54	2	48	0·356
30	Fri	16	22·0	1	5	2	30	55	14	52	9		45·78	15	54	2	57	0·334

* Mean Time may be found by subtracting 0^s·18 from the *Sidereal*.
 † The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's		Sideral Time of the Sun's Semidi- ameter passing the Meridian.*	THE SUN'S							Equation of Time.	Diff. for 1 hour					
		Southing	or Meridian Passage.		Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi-diameter.‡										
h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s			
1	Sat	17	13·1	1	6	2	34	44	15	10	21	N	45·16	15	54	3	4	0·311
2	Sun	18	1·9	1	6	2	38	34	15	28	17		44·53	15	54	3	11	0·288
3	Mon	18	48·4	1	6	2	42	23	15	45	59		43·89	15	53	3	18	0·264
4	Tue	19	32·9	1	6	2	46	14	16	3	24		43·24	15	53	3	24	0·240
5	Wed	20	16 0	1	6	2	50	5	16	20	34		42·57	15	53	3	30	0·216
6	Thu	20	58·2	1	6	2	53	57	16	37	28		41·89	15	53	3	34	0·192
7	Fri	21	40·3	1	6	2	57	49	16	54	5		41·20	15	52	3	39	0·168
8	Sat	22	23·1	1	6	3	1	42	17	10	25		40·49	15	52	3	43	0·144
9	Sun	23	7·3	1	6	3	5	35	17	26	29		39·77	15	52	3	46	0·119
10	Mon	23	53·4	1	6	3	9	29	17	42	14		39·04	15	52	3	48	0·095
11	Tue	conjunc		1	6	3	13	24	17	57	43		38·30	15	52	3	50	0·071
12	Wed	0	42·0	1	6	3	17	19	18	12	53		37·54	15	51	3	52	0·047
13	Thu	1	33·2	1	7	3	21	15	18	27	45		36·77	15	51	3	52	0·023
14	Fri	2	26·9	1	7	3	25	11	18	42	18		35·99	15	51	3	53	0 001
15	Sat	3	22·3	1	7	3	29	8	18	56	32		35·20	15	51	3	52	0·024
16	Sun	4	18·3	1	7	3	33	5	19	10	27		34·39	15	51	3	52	0·047
17	Mon	5	14·1	1	7	3	37	3	19	24	3		33·57	15	50	3	50	0·069
18	Tue	6	8·9	1	7	3	41	2	19	37	19		32·75	15	50	3	48	0·091
19	Wed	7	2·4	1	7	3	45	1	19	50	14		31·90	15	50	3	46	0·113
20	Thu	7	54·8	1	7	3	49	0	20	2	50		31·05	15	50	3	43	0·135
21	Fri	8	46·7	1	7	3	53	0	20	15	5		30·19	15	50	3	39	0·157
22	Sat	9	38·8	1	7	3	57	1	20	26	59		29·31	15	50	3	35	0·178
23	Sun	10	31·5	1	7	4	1	2	20	38	32		28·43	15	49	3	31	0·200
24	Mon	11	25 3	1	7	4	5	3	20	49	43		27·54	15	49	3	26	0·221
25	Tue	12	19·9	1	7	4	9	6	21	0	33		26·65	15	49	3	20	0·241
26	Wed	13	15·0	1	8	4	13	8	21	11	2		25·74	15	49	3	14	0·262
27	Thu	14	9·6	1	8	4	17	11	21	21	9		24·82	15	49	3	8	0·282
28	Fri	15	2·7	1	8	4	21	15	21	30	53		23·90	15	49	3	1	0·302
29	Sat	15	53·6	1	8	4	25	19	21	40	16		22·97	15	48	2	53	0·321
30	Sun	16	41·9	1	8	4	29	23	21	49	15		22·03	15	48	2	45	0·340
31	Mon	17	27 8	1	8	4	33	28	21	57	53		21·08	15	48	2	37	0·358

Add to Mean Time.

* Mean Time may be found by subtracting 0s·18 from the *Sidercal*.
 ‡ The Semidiameter for *Apparent* Noon may be assumed the same
 as that for *Mean* Noon.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southings or Meridian Passage.		Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S										Equation of Time.	Diff. for 1 hour	
					Apparent Right Ascension.			Apparent Declination.			Diff. for 1 hour	Semi- diam- eter.‡					
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s
1	Tue	18	11.6	1	8	4	37	34	22	6	7	N	20.12	15 48	2	28	0.376
2	Wed	18	54.1	1	8	4	41	39	22	13	58		19.16	15 48	2	19	0.393
3	Thu	19	36.1	1	8	4	45	46	22	21	26		18.19	15 48	2	9	0.409
4	Fri	20	18.3	1	8	4	49	52	22	28	31		17.21	15 48	1	59	0.425
5	Sat	21	1.5	1	8	4	53	59	22	35	12		16.23	15 48	1	49	0.439
6	Sun	21	46.7	1	8	4	58	6	22	41	30		15.24	15 47	1	38	0.453
7	Mon	22	34.5	1	8	5	2	14	22	47	23		14.24	15 47	1	27	0.466
8	Tue	23	25.2	1	8	5	6	22	22	52	53		13.24	15 47	1	16	0.478
9	Wed	conjunc		1	8	5	10	30	22	57	59		12.24	15 47	1	4	0.489
10	Thu	0	18.9	1	8	5	14	38	23	2	40		11.23	15 47	0	52	0.499
11	Fri	1	15.0	1	8	5	18	47	23	6	58		10.21	15 47	0	40	0.508
12	Sat	2	12.2	1	8	5	22	56	23	10	50		9.19	15 47	0	28	0.515
13	Sun	3	9.4	1	8	5	27	5	23	14	19		8.17	15 47	0	15	0.522
14	Mon	4	5.4	1	8	5	31	14	23	17	23		7.15	15 47	0	3	0.527
15	Tue	4	59.6	1	8	5	35	23	23	20	2		6.12	15 47	0	10	0.531
16	Wed	5	52.0	1	8	5	39	33	23	22	16		5.08	15 46	0	23	0.534
17	Thu	6	43.3	1	8	5	43	42	23	24	6		4.05	15 46	0	36	0.537
18	Fri	7	34.0	1	8	5	47	52	23	25	31		3.02	15 46	0	49	0.539
19	Sat	8	24.9	1	8	5	52	1	23	26	31		1.98	15 46	1	1	0.539
20	Sun	9	16.8	1	8	5	56	11	23	27	6		0.95	15 46	1	14	0.538
21	Mon	10	9.8	1	8	6	0	20	23	27	16		0.09	15 46	1	27	0.537
22	Tue	11	3.8	1	8	6	4	29	23	27	2		1.12	15 46	1	40	0.536
23	Wed	11	58.1	1	8	6	8	39	23	26	22		2.15	15 46	1	53	0.533
24	Thu	12	51.9	1	8	6	12	48	23	25	18		3.18	15 46	2	6	0.529
25	Fri	13	44.0	1	8	6	16	57	23	23	50		4.21	15 46	2	18	0.525
26	Sat	14	33.9	1	8	6	21	6	23	21	56		5.24	15 46	2	31	0.519
27	Sun	15	21.3	1	8	6	25	15	23	19	38		6.26	15 46	2	43	0.513
28	Mon	16	6.3	1	8	6	29	24	23	16	56		7.29	15 46	2	56	0.506
29	Tue	16	49.5	1	8	6	33	33	23	13	49		8.31	15 46	3	8	0.498
30	Wed	17	31.5	1	8	6	37	41	23	10	17		9.32	15 46	3	19	0.489

* Mean Time may be found by subtracting 0^m 19 from the Sidercal.

† The Semidiameter for Apparent Noon may be assumed the same as that for Mean Noon.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's		Sideral Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S.							Equation of Time.	Diff. for 1 hour			
		Southings	or Meridian Passage.		Apparent Right Ascension.	Apparent Declination.			Diff. for 1 hour	Semi- diam- eter.‡						
		h	m	m s	h	m	s	°	'	"	"	'	"	m	s	s
1	Thu	18	13.3	1 8	6	41	49	23	6	22	N	10.33	15 46	3	31	0.480
2	Fri	18	55.6	1 8	6	45	57	23	2	2		11.34	15 46	3	42	0.469
3	Sat	19	39.3	1 8	6	50	5	22	57	17		12.35	15 46	3	54	0.458
4	Sun	20	25.3	1 8	6	54	12	22	52	9		13.34	15 46	4	4	0.446
5	Mon	21	14.3	1 8	6	58	20	22	46	37		14.33	15 46	4	15	0.433
6	Tue	22	6.7	1 8	7	2	26	22	40	41		15.32	15 46	4	25	0.419
7	Wed	23	2.2	1 8	7	6	33	22	34	22		16.30	15 46	4	35	0.405
8	Thu	conjunc		1 8	7	10	39	22	27	39		17.28	15 46	4	45	0.389
9	Fri	0	0.1	1 8	7	14	45	22	20	33		18.24	15 46	4	54	0.372
10	Sat	0	58.9	1 8	7	18	50	22	13	4		19.20	15 46	5	3	0.355
11	Sun	1	57.1	1 8	7	22	55	22	5	11		20.15	15 46	5	11	0.336
12	Mon	2	53.6	1 8	7	26	59	21	56	56		21.10	15 46	5	19	0.316
13	Tue	3	48.0	1 8	7	31	3	21	48	19		22.04	15 46	5	26	0.296
14	Wed	4	40.4	1 8	7	35	6	21	39	19		22.96	15 46	5	33	0.275
15	Thu	5	31.7	1 8	7	39	9	21	29	57		23.88	15 46	5	39	0.253
16	Fri	6	22.4	1 7	7	43	12	21	20	13		24.79	15 46	5	45	0.232
17	Sat	7	13.3	1 7	7	47	14	21	10	7		25.70	15 46	5	50	0.209
18	Sun	8	5.0	1 7	7	51	15	20	59	40		26.60	15 46	5	55	0.186
19	Mon	8	57.6	1 7	7	55	16	20	48	51		27.47	15 47	5	59	0.163
20	Tue	9	50.8	1 7	7	59	16	20	37	41		28.34	15 47	6	3	0.140
21	Wed	10	44.0	1 7	8	3	15	20	26	11		29.20	15 47	6	6	0.116
22	Thu	11	36.2	1 7	8	7	15	20	14	20		30.05	15 47	6	8	0.092
23	Fri	12	26.8	1 7	8	11	13	20	2	9		30.89	15 47	6	10	0.068
24	Sat	13	15.1	1 7	8	15	11	19	49	38		31.72	15 47	6	12	0.044
25	Sun	14	1.1	1 7	8	19	8	19	36	46		32.54	15 47	6	13	0.019
26	Mon	14	45.1	1 7	8	23	5	19	23	36		33.35	15 47	6	13	0.005
27	Tue	15	27.6	1 7	8	27	1	19	10	6		34.15	15 47	6	12	0.030
28	Wed	16	9.3	1 6	8	30	57	18	56	17		34.94	15 47	6	11	0.054
29	Thu	16	50.9	1 6	8	34	52	18	42	9		35.71	15 48	6	10	0.078
30	Fri	17	33.4	1 6	8	38	46	18	27	43		36.48	15 48	6	8	0.103
31	Sat	18	17.5	1 6	8	42	40	18	12	58		37.23	15 48	6	5	0.128

* Mean Time may be found by subtracting 0s.19 from the *Sidereal*.‡ The Semidiameter for *Apparent* Noon may be assumed the same as that for *Mean* Noon.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.		Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S								Equation of Time.	Diff. for 1 hour					
					Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter.‡											
h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s				
1	Sun	19	42	1	6	8	46	33	17	57	56	N	37	97	15	48	6	1	0.152
2	Mon	19	54	1	6	8	50	26	17	42	36		38	70	15	48	5	57	0.176
3	Tue	20	47	1	6	8	54	18	17	26	58		39	42	15	48	5	53	0.200
4	Wed	21	43	1	6	8	58	9	17	11	4		40	12	15	48	5	48	0.224
5	Thu	22	42	1	6	9	2	0	16	54	52		40	82	15	48	5	42	0.249
6	Fri	23	41	1	6	9	5	50	16	38	24		41	50	15	49	5	36	0.273
7	Sat	conjunc		1	6	9	9	40	16	21	41		42	16	15	49	5	29	0.297
8	Sun	0	40	1	6	9	13	29	16	4	41		42	81	15	49	5	22	0.322
9	Mon	1	37	1	5	9	17	18	15	47	25		43	45	15	49	5	14	0.346
10	Tue	2	32	1	5	9	21	6	15	29	55		44	08	15	49	5	5	0.371
11	Wed	3	25	1	5	9	24	53	15	12	9		44	69	15	49	4	56	0.395
12	Thu	4	18	1	5	9	28	40	14	54	9		45	29	15	49	4	46	0.419
13	Fri	5	9	1	5	9	32	26	14	35	55		45	88	15	50	4	36	0.442
14	Sat	6	1	1	5	9	36	12	14	17	27		46	46	15	50	4	25	0.465
15	Sun	6	54	1	5	9	39	57	13	58	45		47	01	15	50	4	13	0.489
16	Mon	7	47	1	5	9	43	41	13	39	50		47	56	15	50	4	1	0.511
17	Tue	8	39	1	5	9	47	25	13	20	42		48	10	15	50	3	49	0.533
18	Wed	9	31	1	5	9	51	9	13	1	21		48	61	15	51	3	36	0.555
19	Thu	10	22	1	5	9	54	52	12	41	48		49	12	15	51	3	22	0.575
20	Fri	11	10	1	5	9	58	34	12	22	3		49	61	15	51	3	8	0.596
21	Sat	11	57	1	5	10	2	16	12	2	6		50	10	15	51	2	54	0.615
22	Sun	12	41	1	4	10	5	58	11	41	58		50	57	15	51	2	39	0.634
23	Mon	13	24	1	4	10	9	39	11	21	39		51	03	15	52	2	23	0.652
24	Tue	14	6	1	4	10	13	20	11	1	9		51	47	15	52	2	7	0.669
25	Wed	14	48	1	4	10	17	0	10	40	28		51	90	15	52	1	51	0.686
26	Thu	15	30	1	4	10	20	40	10	19	37		52	32	15	52	1	34	0.702
27	Fri	16	12	1	4	10	24	19	9	58	36		52	73	15	52	1	17	0.718
28	Sat	16	57	1	4	10	27	59	9	37	26		53	12	15	53	1	0	0.732
29	Sun	17	45	1	4	10	31	37	9	16	6		53	50	15	53	0	42	0.745
30	Mon	18	35	1	4	10	35	16	8	54	37		53	86	15	53	0	24	0.758
31	Tue	19	28	1	4	10	38	54	8	33	0		54	22	15	53	0	6	0.771

* Mean Time may be found by subtracting 0.18 from the *Sidereal*.
 ‡ The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's		Sider'l Time of the Sun's Semidi- ameter passing the Meridi- an.*	THE SUN'S								Equation of Time.	Diff. for 1 hour			
		Southings	or Meridian Passage		Apparent Right Ascension.			Apparent Declination.			Diff. for 1 hour	Semi- diam- eter.‡					
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s
1	Wed	20	25.2	1	4	10	42	32	8	11	14	N	54.56	15 54	0	13	0.782
2	Thu	21	23.2	1	4	10	46	10	7	49	20		54.89	15 54	0	32	0.794
3	Fri	22	21.9	1	4	10	49	47	7	27	19		55.20	15 54	0	51	0.806
4	Sat	23	20.1	1	4	10	53	24	7	5	10		55.50	15 54	1	10	0.814
5	Sun	conjunc		1	4	10	57	1	6	42	55		55.78	15 54	1	30	0.824
6	Mon	0	17.0	1	4	11	0	38	6	20	32		56.05	15 55	1	50	0.833
7	Tue	1	12.6	1	4	11	4	14	5	58	4		56.31	15 55	2	10	0.841
8	Wed	2	7.1	1	4	11	7	50	5	35	29		56.55	15 55	2	30	0.849
9	Thu	3	1.1	1	4	11	11	26	5	12	48		56.78	15 55	2	51	0.856
10	Fri	3	54.8	1	4	11	15	2	4	50	3		56.99	15 56	3	11	0.862
11	Sat	4	48.7	1	4	11	18	38	4	27	12		57.19	15 56	3	32	0.867
12	Sun	5	42.5	1	4	11	22	14	4	4	17		57.38	15 56	3	53	0.872
13	Mon	6	36.0	1	4	11	25	49	3	41	18		57.54	15 57	4	14	0.877
14	Tue	7	28.5	1	4	11	29	25	3	18	15		57.70	15 57	4	35	0.880
15	Wed	8	19.4	1	4	11	33	0	2	55	8		57.84	15 57	4	56	0.882
16	Thu	9	8.3	1	4	11	36	36	2	31	58		57.96	15 57	5	17	0.884
17	Fri	9	55.1	1	4	11	40	11	2	8	45		58.08	15 58	5	39	0.884
18	Sat	10	40.0	1	4	11	43	46	1	45	29		58.18	15 58	6	0	0.884
19	Sun	11	23.2	1	4	11	47	22	1	22	12		58.27	15 58	6	21	0.883
20	Mon	12	5.3	1	4	11	50	57	0	58	52		58.34	15 58	6	42	0.880
21	Tue	12	46.8	1	4	11	54	32	0	35	31		58.40	15 59	7	3	0.877
22	Wed	13	28.5	1	4	11	58	8	0	12	8	N	58.45	15 59	7	24	0.872
23	Thu	14	10.9	1	4	12	1	44	0	11	15	S	58.49	15 59	7	45	0.867
24	Fri	14	54.8	1	4	12	5	20	0	34	39		58.51	15 59	8	6	0.860
25	Sat	15	40.7	1	4	12	8	55	0	58	4		58.52	16 0	8	27	0.853
26	Sun	16	29.1	1	4	12	12	32	1	21	29		58.51	16 0	8	47	0.845
27	Mon	17	20.1	1	4	12	16	8	1	44	53		58.49	16 0	9	7	0.836
28	Tue	18	13.7	1	4	12	19	45	2	8	17		58.45	16 1	9	27	0.825
29	Wed	19	9.1	1	4	12	23	22	2	31	39		58.40	16 1	9	47	0.814
30	Thu	20	5.7	1	4	12	26	59	2	55	1		58.34	16 1	10	6	0.802

Add to Mean time.

Add to Mean Time.

Mean Time may be found by subtracting 0s.18 from the *Sidercal*.† The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's		Sideral Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S							Equation of Time.	Diff. for 1 hour					
		Southings or Meridian Passage.			Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter.‡										
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s	
1	Fri	21	2.5	1	4	12	30	36	3	18	20	S	58.26	16	1	10	25	0.790
2	Sat	21	59.0	1	4	12	34	14	3	41	38		58.17	16	2	10	44	0.777
3	Sun	22	54.7	1	4	12	37	52	4	4	53		58.06	16	2	11	3	0.763
4	Mon	23	50.1	1	4	12	41	30	4	28	5		57.94	16	2	11	21	0.748
5	Tue	conjunc		1	4	12	45	9	4	51	14		57.80	16	2	11	38	0.733
6	Wed	0	45.2	1	4	12	48	48	5	14	20		57.64	16	3	11	56	0.717
7	Thu	1	40.6	1	4	12	52	28	5	37	21		57.46	16	3	12	13	0.700
8	Fri	2	36.4	1	4	12	56	8	6	0	19		57.27	16	3	12	29	0.683
9	Sat	3	32.4	1	4	12	59	48	6	23	11		57.07	16	4	12	46	0.665
10	Sun	4	28.0	1	4	13	3	29	6	45	59		56.84	16	4	13	1	0.646
11	Mon	5	22.4	1	4	13	7	10	7	8	40		56.61	16	4	13	17	0.627
12	Tue	6	15.0	1	5	13	10	52	7	31	16		56.36	16	4	13	31	0.607
13	Wed	7	5.3	1	5	13	14	34	7	53	46		56.09	16	5	13	46	0.586
14	Thu	7	53.0	1	5	13	18	17	8	16	9		55.80	16	5	14	0	0.564
15	Fri	8	38.4	1	5	13	22	0	8	38	25		55.50	16	5	14	13	0.542
16	Sat	9	21.9	1	5	13	25	44	9	0	33		55.18	16	6	14	26	0.518
17	Sun	10	4.2	1	5	13	29	28	9	22	33		54.85	16	6	14	38	0.494
18	Mon	10	45.7	1	5	13	33	13	9	44	26		54.50	16	6	14	49	0.469
19	Tue	11	27.3	1	5	13	36	59	10	6	10		54.14	16	6	15	0	0.443
20	Wed	12	9.6	1	5	13	40	45	10	27	44		53.76	16	7	15	11	0.416
21	Thu	12	53.1	1	5	13	44	32	10	49	10		53.36	16	7	15	20	0.389
22	Fri	13	38.6	1	5	13	48	20	11	10	26		52.95	16	7	15	29	0.361
23	Sat	14	26.3	1	6	13	52	8	11	31	32		52.53	16	7	15	38	0.332
24	Sun	15	16.3	1	6	13	55	57	11	52	27		52.09	16	8	15	45	0.302
25	Mon	16	8.4	1	6	13	59	47	12	13	12		51.63	16	8	15	52	0.271
26	Tue	17	2.2	1	6	14	3	37	12	33	45		51.15	16	8	15	58	0.240
27	Wed	17	56.8	1	6	14	7	28	12	54	7		50.66	16	8	16	4	0.209
28	Thu	18	51.6	1	6	14	11	20	13	14	17		50.16	16	9	16	8	0.177
29	Fri	19	46.0	1	6	14	15	13	13	34	14		49.63	16	9	16	12	0.144
30	Sat	20	40.0	1	6	14	19	6	13	53	59		49.09	16	9	16	15	0.111
31	Sun	21	33.8	1	6	14	23	1	14	13	30		48.53	16	9	16	17	0.077

* Mean Time may be found by subtracting 0^h 18 from the *Sidereal*.

† The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's		Sideral Time of the Sun's Semidiameter passing the Meridian.*	THE SUN'S						Equation of Time.	Diff. for 1 hour
		Southings	or Meridian Passage.		Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi-diameter.				
		h m		m s	h m s	° ' "	"	"	"	m s		s
1	Mon	22 27.8		1 6	14 26 56	14 32 48 S	47.95	16 10	16 19		0.044	
2	Tue	23 22.6		1 7	14 30 52	14 51 52	47.36	16 10	16 19		0.010	
3	Wed	conjunc		1 7	14 34 48	15 10 41	46.75	16 10	16 19		0.025	
4	Thu	0 18.6		1 7	14 38 46	15 29 16	46.12	16 10	16 18		0.059	
5	Fri	1 15.6		1 7	14 42 44	15 47 35	45.48	16 11	16 16		0.093	
6	Sat	2 13.1		1 7	14 46 44	16 5 38	44.81	16 11	16 14		0.128	
7	Sun	3 10.1		1 7	14 50 44	16 23 25	44.13	16 11	16 10		0.163	
8	Mon	4 5.5		1 7	14 54 45	16 40 56	43.48	16 11	16 6		0.197	
9	Tue	4 58.3		1 7	14 58 46	16 58 9	42.71	16 12	16 1		0.231	
10	Wed	5 48.1		1 8	15 2 49	17 15 5	41.98	16 12	15 55		0.266	
11	Thu	6 35.0		1 8	15 6 52	17 31 44	41.22	16 12	15 48		0.300	
12	Fri	7 19.5		1 8	15 10 56	17 48 4	40.45	16 12	15 40		0.335	
13	Sat	8 2.1		1 8	15 15 1	18 4 5	39.67	16 13	15 32		0.369	
14	Sun	8 43.7		1 8	15 19 7	18 19 47	38.87	16 13	15 23		0.404	
15	Mon	9 25.1		1 8	15 23 14	18 35 10	38.05	16 13	15 12		0.439	
16	Tue	10 7.1		1 8	15 27 21	18 50 13	37.22	16 13	15 1		0.473	
17	Wed	10 50.3		1 8	15 31 30	19 4 56	36.37	16 13	14 50		0.507	
18	Thu	11 35.4		1 8	15 35 39	19 19 18	35.51	16 14	14 37		0.542	
19	Fri	12 22.8		1 9	15 39 49	19 33 20	34.63	16 14	14 24		0.577	
20	Sat	13 12.7		1 9	15 44 0	19 47 0	33.74	16 14	14 9		0.611	
21	Sun	14 4.9		1 9	15 48 11	20 0 18	32.83	16 14	13 54		0.644	
22	Mon	14 58.7		1 9	15 52 24	20 13 15	31.91	16 14	13 38		0.678	
23	Tue	15 53.1		1 9	15 56 37	20 25 49	30.98	16 15	13 22		0.711	
24	Wed	16 47.3		1 9	16 0 51	20 38 1	30.03	16 15	13 4		0.744	
25	Thu	17 40.7		1 9	16 5 6	20 49 50	29.06	16 15	12 46		0.776	
26	Fri	18 33.1		1 9	16 9 21	21 1 15	28.08	16 15	12 27		0.808	
27	Sat	19 24.9		1 9	16 13 38	21 12 17	27.09	16 15	12 7		0.838	
28	Sun	20 16.6		1 10	16 17 55	21 22 55	26.09	16 15	11 47		0.868	
29	Mon	21 8.9		1 10	16 22 12	21 33 8	25.07	16 16	11 26		0.898	
30	Tue	22 2.6		1 10	16 26 31	21 42 57	24.04	16 16	11 4		0.927	

Add to Mean Time.

* Mean Time may be found by subtracting 0.19 from the *Sidereal*.
 † The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.	Sideral Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S				Equation of Time.	Diff. for 1 hour
				Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter. ‡		
1	Wed	22 58.1	1 10	16 30 50	21 52 22 S	22.99	16 16	10 41	0.954
2	Thu	23 55.1	1 10	16 35 10	22 1 21	21.94	16 16	10 18	0.981
3	Fri	conjunc	1 10	16 39 30	22 9 54	20.88	16 16	9 54	1.006
4	Sat	0 53.0	1 10	16 43 51	22 18 2	19.80	16 16	9 30	1.030
5	Sun	1 50.3	1 10	16 48 13	22 25 44	18.71	16 16	9 5	1.053
6	Mon	2 45.8	1 10	16 52 35	22 32 59	17.61	16 17	8 39	1.074
7	Tue	3 38.5	1 10	16 56 57	22 39 49	16.50	16 17	8 13	1.094
8	Wed	4 27.8	1 10	17 1 20	22 46 11	15.38	16 17	7 47	1.113
9	Thu	5 14.1	1 10	17 5 44	22 52 6	14.25	16 17	7 20	1.131
10	Fri	5 58.0	1 10	17 10 8	22 57 35	13.12	16 17	6 52	1.147
11	Sat	6 40.1	1 11	17 14 32	23 2 36	11.98	16 17	6 25	1.162
12	Sun	7 21.5	1 11	17 18 57	23 7 9	10.83	16 17	5 57	1.176
13	Mon	8 2.9	1 11	17 23 22	23 11 15	9.68	16 17	5 28	1.189
14	Tue	8 45.3	1 11	17 27 47	23 14 53	8.52	16 17	5 0	1.200
15	Wed	9 29.5	1 11	17 32 12	23 18 4	7.35	16 17	4 31	1.211
16	Thu	10 16.1	1 11	17 36 38	23 20 46	6.19	16 18	4 1	1.220
17	Fri	11 5.5	1 11	17 41 4	23 23 0	5.02	16 18	3 32	1.228
18	Sat	11 57.7	1 11	17 45 30	23 24 46	3.84	16 18	3 3	1.234
19	Sun	12 52.1	1 11	17 49 56	23 26 4	2.67	16 18	2 33	1.239
20	Mon	13 47.7	1 11	17 54 23	23 26 54	1.49	16 18	2 3	1.243
21	Tue	14 43.2	1 11	17 58 49	23 27 16	0.31	16 18	1 33	1.245
22	Wed	15 37.7	1 11	18 3 16	23 27 9	0.87	16 18	1 3	1.247
23	Thu	16 30.6	1 11	18 7 42	23 26 34	2.05	16 18	0 33	1.247
24	Fri	17 22.1	1 11	18 12 8	23 25 31	3.22	16 18	0 4	1.246
25	Sat	18 12.7	1 11	18 16 35	23 23 59	4.40	16 18	0 26	1.243
26	Sun	19 3.3	1 11	18 21 1	23 22 0	5.58	16 18	0 56	1.239
27	Mon	19 54.6	1 11	18 25 27	23 19 32	6.75	16 18	1 26	1.233
28	Tue	20 47.4	1 11	18 29 54	23 16 36	7.92	16 18	1 55	1.227
29	Wed	21 42.0	1 11	18 34 19	23 13 12	9.09	16 18	2 25	1.219
30	Thu	22 38.2	1 11	18 38 45	23 9 20	10.25	16 18	2 54	1.209
31	Fri	23 35.1	1 11	18 43 11	23 5 0	11.40	16 18	3 23	1.198

Add to Mean Time.

Sub. from Mean.

* Mean Time may be found by subtracting 0^m.19 from the *Sidereal*.‡ The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

BRISTOL CHANNEL LIGHTS AND TOWER FOR SHIPS' GUIDANCE.

NAMES OF PLACES.	LIGHTS.	NOW SHOWN.	DISTANCE SEEN.	ELEVATION OF LIGHTS, WITH REMARKS.
TREVOSE HEAD	Two..	{ Upper, fixed .. Lower, " ..	.....	Upper, 204 feet, seen from South to E. $\frac{1}{2}$ S. Lower, 129 feet, seen from N.E. $\frac{1}{2}$ E. to S.W. $\frac{1}{2}$ W.
PADSTOW	Tower		8 leag. clear weath	Elevated 264 feet above the level of the sea.
LUNDY ISLAND	Two..	{ Upper, revolves. Lower, fixed ..	30 miles	Upper, 528 ft. revolves in 2 m. and seen all round.
BIDEFORD	Two..	{ Upper, fixed .. Lower, " ..	28 miles	Lower, 9 ft. from ground, increased in power.
ILFRACOMBE, Harb.	One..	{ Upper, fixed .. Lower, " ..	15 miles	Upper, 86 ft. } being 933 ft. asunder.
MINEHEAD, Harbour	One..	Fixed, red	"	Lower, 40 ft. } shown from Michaelmas to Lady-day only.
BURNHAM	Two..	{ Fixed .....	.....	Shown during Tide Time.
		{ Upper, flashes..	.....	Elevated 91 $\frac{1}{2}$ ft.; flashes in 3 $\frac{1}{2}$ m., and seen from N.b. W. to W.b. N.
		{ Lower, fixed ..	.....	Elevated 23 ft., seen from N.W.b. W. $\frac{1}{2}$ W. to W.b. N.
FLATHOLM	One..	Fixed	16 miles	Elevated 156 ft. above high water.
FLOAT. LIGHT VES.	One..	Revolving .....	.....	Off the English Grounds.
FLOAT. LIGHT VES.	One..	{ Upper, revolves. Lower, fixed, red	.....	Near the W. end of the One Fathom Bank.
AVON, River	One..	Fixed, red	12 miles	Elevated 73 ft.; visible 12 miles.
NASH POINT	Two..	{ Upper, fixed .. Lower, " ..	.....	Elevated 167 feet, } being 1000 feet asunder.
		{ Fixed .....	.....	" 123 feet, }
MUMBLES	One..	Fixed	15 miles	Elevated 114 feet, }
SWANSEA, Harbour..	One..	Fixed, red	9 miles clear weath	" 28 feet, } above high-water level.
SCARWEATHER SAND	One..	Revolving, red ..	.....	Elevated 38 feet; flashes in 20 seconds.
LIGHT VESSEL &c.	One..	Revolving .....	.....	Seen from sun-set to sun-rise, sides red, with, "Helwick" painted on them.
PORTHCAWL Harbour	One..	Fixed .....	.....
CALDY ISLAND	One..	Fixed	19 miles	Upper 192 feet, } above the level of the sea.
ST. ANN'S POINT . .	One..	{ Upper, fixed .. Lower, " ..	19 miles	Lower 159 feet, }
		{ Fixed	16 miles	Elevated 70 feet above high-water level.

TIDE TABLES.

EXPLANATION.

The Tides in this work are calculated for Greenwich Mean Time, and the Height for that Tide nearest mid-day at the following places:—

BARNSTAPLE.—*The Bar.*

BRIDGEWATER.—*The Bridge. The Time of high-water at Bridgewater Bar is about 40 minutes earlier. The depth of water at Cumbwitch Pill is 7 to 8 feet more than in the Tables.*

BRISTOL.—*Cumberland Gates. The height at Bathurst Gates is 9 feet 2 inches less than in the Tables.*

BRITON FERRY.—*Neath Bar. At Vale of Neath Railway Wharf, the depth is 8 inches less than in the Tables; at Giants Grave, 2 feet 6 inches less; Crown Works, and Neath Abbey 4 feet 6 inches less; Neath, 5 feet 6 inches less.*

CARDIFF.—*East Dock Sill. At the West Dock, the depth is 3 feet less than in the Tables; at the Glamorganshire Canal, 13 feet less.*

GLOUCESTER.—*Entrance to the Canal at Sharpness Point.*

ILFRACOMBE.—*Pier Head.*

LLANELLY.—*Dock Gates. At Burry Bar the depth of water is 8 feet more than in the Tables.*

NEWPORT.—*Dock Gates, which are about 40 feet above the bed of the river.*

MILFORD HAVEN.—*The heights are the rise above low-water at spring tides. The time at St. Ann's Lighthouse, is about 25 minutes earlier.*

SWANSEA.—*Entrance Channel. The depth of water at New Cut Bridge, is about 4 feet, and at Hafod Works 7 feet 6 inches less than in the Tables.*

PHASES OF THE MOON.

Last Quarter. 5th, 6h. 23m. a.m. | First Quarter. 21st, 0h. 26m. a.m.
 New Moon .. 12th, 6h. 53m. p.m. | Full Moon .. 28th, 1h. 50m. a.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.,				Bristol.			
		Morn.		Even.		Height		Morn		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	7	33	7	58	27	11	9	28	9	51	15	11
2	Saturday..	8	22	8	47	27	5	10	13	10	35	15	3
3	Sunday ..	9	9	9	32	26	6	10	55	11	14	14	2
4	Monday..	9	54	10	19	25	7	11	34	11	58	13	0
5	Tuesday..	10	42	11	8	24	5	..	0	25	11	7	..
6	Wednesday	11	36	..	23	6	0	54	1	25	10	5	0
7	Thursday.	0	9	0	48	23	1	2	1	2	38	9	11
8	Friday ..	1	28	2	6	23	5	3	14	3	51	10	4
9	Saturday .	2	42	3	14	24	2	4	30	5	5	11	3
10	Sunday ..	3	45	4	12	24	11	5	38	6	6	12	2
11	Monday..	4	40	5	4	25	7	6	34	6	58	13	0
12	Tuesday..	5	27	5	47	25	9	7	22	7	43	13	3
13	Wednesday	6	6	6	24	26	0	8	3	8	20	13	6
14	Thursday.	6	43	6	59	26	2	8	39	8	55	13	9
15	Friday ..	7	15	7	32	26	1	9	11	9	27	13	8
16	Saturday..	7	50	8	8	25	9	9	43	10	0	13	3
17	Sunday ..	8	25	8	41	25	4	10	15	10	29	12	8
18	Monday..	8	56	9	12	24	9	10	43	10	57	12	0
19	Tuesday..	9	29	9	47	24	1	11	11	11	27	11	2
20	Wednesday	10	5	10	26	23	4	11	45	..	10	2	11
21	Thursday.	10	48	11	4	22	6	0	6	0	32	9	2
22	Friday ..	11	44	..	22	2	2	1	1	1	33	8	9
23	Saturday..	0	18	0	58	22	5	2	10	2	47	9	1
24	Sunday ..	1	37	2	16	23	3	3	24	4	2	10	1
25	Monday..	2	52	3	27	24	7	4	41	5	19	11	9
26	Tuesday..	3	57	4	24	26	1	5	50	6	19	13	8
27	Wednesday	4	54	5	21	27	5	6	48	7	15	15	3
28	Thursday.	5	47	6	11	28	0	7	43	8	8	16	0
29	Friday ..	6	34	6	57	28	10	8	30	8	53	17	1
30	Saturday..	7	20	7	45	28	11	9	16	9	38	17	2
31	Sunday ..	8	8	8	32	28	7	10	0	10	21	16	9

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m — Bridgewater, *sub.* 12m. — Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter . 5th, 6h. 23m. a.m. | First Quarter. 21st, 0h. 28m. a.m.
 New Moon .. 12th, 6h. 53m. p.m. | Full Moon .. 28th, 1h. 30m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	8	8	8	33	22	5	9	0	9	23	31	0
2	Saturday..	8	57	9	22	21	10	9	45	10	7	30	2
3	Sunday ..	9	44	10	7	20	8	10	27	10	46	28	9
4	Monday..	10	29	10	54	19	6	11	6	11	30	27	3
5	Tuesday..	11	17	11	43	18	1	11	57	..	..	25	5
6	Wednesdy	..	..	0	11	16	11	0	26	0	57	24	0
7	Thursday.	0	44	1	23	16	5	1	33	2	10	23	5
8	Friday ..	2	3	2	41	16	10	2	46	3	23	23	11
9	Saturday..	3	17	3	49	17	9	4	2	4	37	25	0
10	Sunday ..	4	20	4	47	18	8	5	10	5	38	26	3
11	Monday..	5	15	5	39	19	6	6	6	6	30	27	3
12	Tuesday..	6	2	6	22	19	9	6	54	7	15	27	6
13	Wednesdy	6	41	6	59	20	0	7	35	7	52	28	0
14	Thursday.	7	18	7	34	20	3	8	11	8	27	28	3
15	Friday ..	7	50	8	7	20	2	8	43	8	59	28	1
16	Saturday..	8	25	8	43	19	9	9	15	9	32	27	6
17	Sunday ..	9	0	9	16	19	2	9	47	10	1	26	11
18	Monday..	9	31	9	47	18	6	10	15	10	29	26	0
19	Tuesday..	10	4	10	22	17	8	10	43	10	59	24	11
20	Wednesdy	10	40	11	1	16	8	11	17	11	38	23	9
21	Thursday.	11	23	11	49	15	8	..	..	0	4	22	6
22	Friday ..	..	..	0	19	15	3	0	33	1	5	22	0
23	Saturday..	0	53	1	33	15	7	1	42	2	19	22	4
24	Sunday ..	2	12	2	51	16	7	2	56	3	34	23	8
25	Monday..	3	27	4	2	18	3	4	13	4	51	25	8
26	Tuesday..	4	32	4	59	20	2	5	22	5	51	28	1
27	Wednesdy	5	29	5	56	21	10	6	20	6	47	30	2
28	Thursday.	6	22	6	46	22	6	7	15	7	40	31	1
29	Friday ..	7	9	7	32	23	7	8	2	8	25	32	4
30	Saturday..	7	55	8	20	23	8	8	48	9	10	32	6
31	Sunday ..	8	43	9	7	23	3	9	32	9	53	31	11
		10	25	10	46	30	5						

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 5th, 6h. 23m. a.m. | First Quarter. 21st, 0h. 26m. a.m.
 New Moon .. 12th, 6h. 53m. p.m. | Full Moon .. 28th, 1h. 30m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.
1	Friday ..	7 43	8 8	21 9	9	8 18	8 43	22 3	3	8 18	8 43	21 5	5
2	Saturday..	8 32	8 57	21 3	3	9 7	9 32	21 9	9	9 7	9 32	20 11	11
3	Sunday ..	9 19	9 42	20 2	2	9 54	10 17	20 8	8	9 54	10 17	20 0	0
4	Monday..	10 4	10 29	19 2	2	10 39	11 4	19 8	8	10 39	11 4	19 1	1
5	Tuesday..	10 52	11 18	17 11	11	11 27	11 53	18 5	5	11 27	11 53	17 11	11
6	Wednesdy	11 46	..	16 11	11	..	0 21	17 5	5	..	0 21	17 0	0
7	Thursday..	0 19	0 58	16 6	6	0 54	1 33	17 0	0	0 54	1 33	16 7	7
8	Friday ..	1 38	2 16	16 10	10	2 13	2 51	17 4	4	2 13	2 51	16 11	11
9	Saturday..	2 52	3 24	17 8	8	3 27	3 59	18 2	2	3 27	3 59	17 8	8
10	Sunday ..	3 55	4 22	18 6	6	4 30	4 57	19 0	0	4 30	4 57	18 5	5
11	Monday..	4 50	5 14	19 2	2	5 25	5 49	19 8	8	5 25	5 49	19 1	1
12	Tuesday..	5 37	5 57	19 5	5	6 12	6 32	19 11	11	6 12	6 32	19 3	3
13	Wednesdy	6 16	6 34	19 8	8	6 51	7 9	20 2	2	6 51	7 9	19 6	6
14	Thursday..	6 53	7 9	19 10	10	7 28	7 44	20 4	4	7 28	7 44	19 8	8
15	Friday ..	7 25	7 42	19 9	9	8 0	8 17	20 3	3	8 0	8 17	19 7	7
16	Saturday..	8 0	8 18	19 5	5	8 35	8 53	19 11	11	8 35	8 53	19 2	2
17	Sunday ..	8 35	8 51	18 11	11	9 10	9 26	19 5	5	9 10	9 26	18 10	10
18	Monday ..	9 6	9 22	18 4	4	9 41	9 57	18 10	10	9 41	9 57	18 3	3
19	Tuesday..	9 39	9 57	17 7	7	10 14	10 32	18 1	1	10 14	10 32	17 7	7
20	Wednesdy	10 15	10 36	16 9	9	10 50	11 11	17 3	3	10 50	11 11	16 10	10
21	Thursday..	10 58	11 24	15 10	10	11 33	11 49	16 4	4	11 33	11 49	16 0	0
22	Friday ..	11 53	...	15 6	6	..	0 29	16 0	0	..	0 29	15 8	8
23	Saturday..	0 28	1 8	15 9	9	1 3	1 43	16 3	3	1 3	1 43	15 11	11
24	Sunday ..	1 47	2 26	16 8	8	2 22	3 1	17 2	2	2 22	3 1	16 9	9
25	Monday..	3 2	3 37	18 1	1	3 37	4 12	18 7	7	3 37	4 12	18 1	1
26	Tuesday..	4 7	4 34	19 9	9	4 42	5 9	20 3	3	4 42	5 9	19 7	7
27	Wednesdy	5 4	5 31	21 3	3	5 39	6 6	21 9	9	5 39	6 6	20 11	11
28	Thursday..	5 57	6 21	21 10	10	6 32	6 56	22 4	4	6 32	6 56	21 6	6
29	Friday ..	6 44	7 7	22 9	9	7 19	7 42	23 3	3	7 19	7 42	22 4	4
30	Saturday..	7 30	7 55	22 10	10	8 5	8 30	23 4	4	8 5	8 30	22 5	5
31	Sunday ..	8 18	8 42	22 6	6	8 53	9 17	23 0	0	8 53	9 17	22 11	11

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 5th, 6h. 23m. a.m. | First Quarter. 21st, 0h. 26m. a.m.
 New Moon .. 12th, 6h. 53m. p.m. | Full Moon .. 28th, 1h. 30m. a.m.

M. D.	W. D.	Newport.				Swansea.				Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.	
		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.	
1	Fri	9 8	9 31	30 8		8 8	8 33	23 5		0 58	1 20			3 46	4 10		
2	Sat	9 53	10 15	29 9		8 57	9 22	22 10		1 44	2 7			4 32	4 56		
3	Sun	10 35	10 54	28 1		9 44	10 7	21 8		2 33	2 56			5 20	5 46		
4	Mo	11 14	11 38	26 5		10 29	10 54	20 6		3 20	3 45			6 11	6 36		
5	Tu	..	0 52	24 2		11 17	11 43	19 1		4 14	4 45			7 2	7 31		
6	Wd	0 34	1 52	22 8		..	0 11	17 11		5 18	5 52			8 1	8 34		
7	Th	1 41	2 18	22 0		0 44	1 23	17 5		6 33	7 11			9 9	9 44		
8	Fri	2 54	3 31	22 7		2 3	2 41	17 10		7 46	8 19			10 20	10 56		
9	Sat	4 10	4 45	23 9		3 17	3 49	18 9		8 51	9 18			11 31	..		
10	Sun	5 18	5 46	25 2		4 20	4 47	19 8		9 44	10 7			0 4	0 32		
11	Mo	6 14	6 38	26 5		5 15	5 39	20 6		10 29	10 51			0 59	1 23		
12	Tu	7 2	7 23	26 9		6 2	6 22	20 9		11 13	11 32			1 47	2 8		
13	Wd	7 43	8 0	27 3		6 41	6 59	21 0		11 52	..			2 29	2 48		
14	Th	8 19	8 35	27 6		7 18	7 34	21 3		0 10	0 29			3 7	3 24		
15	Fri	8 51	9 7	27 4		7 50	8 7	21 2		0 45	1 2			3 42	3 58		
16	Sat	9 23	9 40	26 9		8 25	8 43	20 9		1 19	1 36			4 14	4 31		
17	Sun	9 55	10 9	26 0		9 0	9 16	20 2		1 53	2 10			4 48	5 6		
18	Mo	10 23	10 37	24 11		9 31	9 47	19 6		2 26	2 42			5 23	5 39		
19	Tu	10 51	11 7	23 8		10 4	10 22	18 8		2 59	3 17			5 56	6 14		
20	Wd	11 25	11 46	22 5		10 40	11 1	17 8		3 36	3 58			6 33	6 53		
21	Th	..	0 12	20 11		11 23	11 49	16 8		4 23	4 53			7 15	7 40		
22	Fri	0 41	1 13	20 3		..	0 19	16 3		5 26	6 1			8 9	8 42		
23	Sat	1 50	2 27	20 9		0 53	1 33	16 7		6 43	7 20			9 17	9 53		
24	Sun	3 4	3 42	22 3		2 12	2 51	17 7		7 54	8 28			10 29	11 5		
25	Mo	4 21	4 59	24 6		3 27	4 2	19 3		9 0	9 29			11 40	..		
26	Tu	5 30	5 59	27 4		4 32	4 59	21 2		9 53	10 17			0 13	0 43		
27	Wd	6 28	6 55	29 9		5 29	5 56	22 10		10 41	11 7			1 9	1 34		
28	Th	7 23	7 48	30 9		6 22	6 46	23 6		11 32	11 57			1 59	2 23		
29	Fri	8 10	8 33	32 2		7 9	7 32	24 7		..	0 20			2 48	3 12		
30	Sat	8 56	9 18	32 4		7 55	8 20	24 8		0 43	1 7			3 34	3 56		
31	Sun	9 40	10 1	31 8		8 43	9 7	24 3		1 31	1 53			4 19	4 43		

The above are in Greenwich Mean Time, if local time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter.. 3rd, 4h. 56m. p.m. | First Quarter. 19th, 5h. 6m. p.m.
 New Moon .. 11th, 1h. 54m. p.m. | Full Moon .. 26th, 0h. 5m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Monday..	8	53	9	13	27	9	10	40	10	58	15	9
2	Tuesday..	9	34	9	56	26	5	11	16	11	36	14	1
3	Wednesday..	10	17	10	38	25	0	11	57	..	12	3	11
4	Thursday..	11	2	11	31	23	4	0	20	0	48	10	2
5	Friday ..	..	0	8	22	3	1	20	2	0	8	10	1
6	Saturday..	0	50	1	34	22	1	2	40	8	21	8	8
7	Sunday ..	2	16	2	55	22	9	4	2	4	44	9	6
8	Monday..	3	29	3	58	23	9	5	21	5	51	10	9
9	Tuesday..	4	24	4	50	24	9	6	19	6	44	12	0
10	Wednesday	5	13	5	34	25	2	7	8	7	28	12	6
11	Thursday	5	51	6	7	25	10	7	47	8	4	13	4
12	Friday ..	6	24	6	41	26	4	8	20	8	37	13	11
13	Saturday..	6	56	7	11	26	6	8	52	9	7	14	2
14	Sunday ..	7	26	7	42	26	6	9	21	9	37	14	2
15	Monday..	7	57	8	13	26	3	9	50	10	4	13	10
16	Tuesday..	8	29	8	45	25	9	10	19	10	32	13	3
17	Wednesday	9	0	9	17	25	1	10	46	11	1	12	5
18	Thursday..	9	33	9	50	24	3	11	14	11	30	11	4
19	Friday ..	10	10	10	32	23	3	11	50	..	10	1	11
20	Saturday..	10	58	11	28	22	4	0	13	0	44	8	11
21	Sunday ..	..	0	6	22	0	0	1	17	1	58	8	6
22	Monday..	0	53	1	41	22	7	2	42	3	27	9	3
23	Tuesday..	2	25	3	3	24	1	4	11	4	52	11	2
24	Wednesday	3	36	4	7	25	11	5	29	6	0	13	5
25	Thursday..	4	36	5	3	27	7	6	30	6	57	15	6
26	Friday ..	5	29	5	53	28	5	7	23	7	49	16	7
27	Saturday..	6	18	6	41	29	5	8	14	8	37	17	10
28	Sunday ..	7	2	7	25	29	8	8	58	9	20	18	1

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter . 3rd, 4h. 56m. p.m. | First Quarter. 19th, 5h. 6m. p.m.
 New Moon .. 11th, 1h. 54m. p.m. | Full Moon .. 26th, 0h. 5m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.					Cardiff.					Gloucester.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Monday..	9	28	9	48	22	3	10	12	10	30	30	9	11	5	11	23	28	11
2	Tuesday..	10	9	10	31	20	7	10	48	11	8	28	7	11	41	..	..	26	3
3	Wednesday	10	52	11	13	18	9	11	29	11	52	26	5	0	1	0	22	23	6
4	Thursday..	11	37	..	..	16	8	..	0	20	23	9	0	45	1	13	20	3	3
5	Friday ..	0	6	0	43	15	4	0	52	1	32	22	1	1	45	2	25	18	2
6	Saturday..	1	25	2	9	15	2	2	12	2	53	21	10	3	5	3	46	17	9
7	Sunday ..	2	51	3	30	16	0	3	34	4	16	22	10	4	27	5	9	19	1
8	Monday..	4	4	4	33	17	3	4	53	5	23	24	5	5	46	6	16	21	0
9	Tuesday..	4	59	5	25	18	6	5	51	6	16	26	0	6	44	7	9	23	0
10	Wednesday	5	48	6	9	19	0	6	40	7	0	26	7	7	33	7	53	23	9
11	Thursday..	6	28	6	42	19	10	7	19	7	36	27	8	8	12	8	29	25	1
12	Friday ..	6	59	7	16	20	5	7	52	8	9	28	6	8	45	9	2	26	1
13	Saturday..	7	31	7	46	20	8	8	24	8	39	28	9	9	17	9	32	26	5
14	Sunday ..	8	1	8	17	20	8	8	53	9	9	28	9	9	46	10	2	26	5
15	Monday..	8	32	8	48	20	4	9	22	9	36	28	4	10	15	10	29	25	11
16	Tuesday..	9	4	9	20	19	9	9	51	10	4	27	6	10	45	10	57	24	11
17	Wednesday	9	35	9	52	18	11	10	18	10	33	26	6	11	11	11	26	23	7
18	Thursday..	10	8	10	25	17	10	10	46	11	2	25	2	11	39	11	55	21	11
19	Friday ..	10	45	11	7	16	7	11	22	11	45	23	8	..	0	15	20	1	1
20	Saturday..	11	33	..	..	15	5	..	0	16	22	3	0	38	1	9	18	4	4
21	Sunday ..	0	3	0	41	15	0	0	49	1	30	21	8	1	42	2	23	17	7
22	Monday..	1	28	2	16	15	9	2	14	2	59	22	7	3	7	3	52	18	9
23	Tuesday..	3	0	3	38	17	8	3	43	4	24	24	11	4	36	5	17	21	7
24	Wednesday	4	11	4	42	19	11	5	1	5	32	27	10	5	54	6	25	25	3
25	Thursday..	5	11	5	38	22	0	6	2	6	29	30	6	6	55	7	22	28	7
26	Friday ..	6	4	6	28	23	1	6	55	7	21	31	8	7	48	8	14	30	4
27	Saturday..	6	53	7	16	24	4	7	46	8	9	33	3	8	39	9	2	32	1
28	Sunday ..	7	37	8	0	24	7	8	30	8	52	33	7	9	23	9	45	32	6

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON:

Last Quarter. 3rd, 4h. 56m. p.m. | First Quarter. 19th, 5h. 6m. p.m.
 New Moon .. 11th, 1h. 54m. p.m. | Full Moon .. 26th, 0h. 5m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.						Llanelly.						Milford Haven.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Monday..	9	3	9	23	21	7	9	38	9	58	22	1	9	38	9	58	21	3
2	Tuesday..	9	44	10	6	20	1	10	19	10	41	20	7	10	19	10	41	19	11
3	Wednesday	10	27	10	48	18	7	11	2	11	23	19	1	11	2	11	23	18	6
4	Thursday..	11	12	11	41	16	9	11	47	..	..	17	3	11	47	..	..	16	10
5	Friday ..	..	..	0	18	15	7	0	16	0	53	16	1	0	16	0	53	15	9
6	Saturday .	1	0	1	44	15	5	1	35	2	19	15	11	1	35	2	19	15	7
7	Sunday ..	2	26	3	5	16	1	3	1	3	40	16	7	3	1	3	40	16	3
8	Monday..	3	39	4	8	17	3	4	14	4	43	17	9	4	14	4	43	17	3
9	Tuesday..	4	34	5	0	18	4	5	9	5	35	18	10	5	9	5	35	18	3
10	Wednesday	5	23	5	44	18	9	5	58	6	19	19	3	5	58	6	19	18	8
11	Thursday..	6	1	6	17	19	6	6	36	6	52	20	0	6	36	6	52	19	4
12	Friday ..	6	34	6	51	20	0	7	9	7	26	20	6	7	9	7	26	19	10
13	Saturday..	7	6	7	21	20	2	7	41	7	56	20	8	7	41	7	56	20	0
14	Sunday ..	7	36	7	52	20	2	8	11	8	27	20	8	8	11	8	27	20	0
15	Monday..	8	7	8	23	19	11	8	42	8	58	20	5	8	42	8	58	19	9
16	Tuesday..	8	39	8	55	19	5	9	14	9	30	19	11	9	14	9	30	19	3
17	Wednesday	9	10	9	27	18	8	9	45	10	2	19	2	9	45	10	2	18	7
18	Thursday..	9	43	10	0	17	9	10	18	10	35	18	3	10	18	10	35	17	9
19	Friday ..	10	20	10	42	16	8	10	55	11	17	17	2	10	55	11	17	16	9
20	Saturday..	11	8	11	38	15	8	11	43	..	..	16	2	11	43	..	..	15	10
21	Sunday ..	..	..	0	16	15	3	0	13	0	51	15	9	0	13	0	51	15	6
22	Monday..	1	3	1	51	15	11	1	38	2	26	16	5	1	38	2	26	16	1
23	Tuesday..	2	35	3	13	17	7	3	10	3	48	18	1	3	10	3	48	17	7
24	Wednesday	3	46	4	17	19	7	4	21	4	52	20	1	4	21	4	52	19	5
25	Thursday..	4	46	5	13	21	5	5	21	5	48	21	11	5	21	5	48	21	1
26	Friday ..	5	39	6	3	22	4	6	14	6	38	22	10	6	14	6	38	21	11
27	Saturday .	6	28	6	51	23	5	7	3	7	26	23	11	7	3	7	26	22	11
28	Sunday ..	7	12	7	35	23	8	7	47	8	10	24	2	7	47	8	10	23	2

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 3rd, 4h. 56m. p.m. | First Quarter. 19th, 5h. 6m. p.m.
 New Moon .. 11th, 1h. 54m. p.m. | Full Moon .. 26th, 0h. 5m. p.m.

M. D.	W. D.	Newport.				Swansea.				Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.	
		H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.
1	Mo	10 20	10 38	30 4	4	9 28	9 48	23 3	3	2 17	2 38	5 6	5 30	5 6	5 30		
2	Tu	10 56	11 16	27 11	11	10 9	10 31	21 7	7	3 0	3 23	5 52	6 15	5 52	6 15		
3	Wd	11 37	12 0	25 4	4	10 52	11 13	19 9	9	3 47	4 12	6 39	7 4	6 39	7 4		
4	Th	..	0 28	22 5	5	11 37	..	17 8	8	4 39	5 11	7 29	7 56	7 29	7 56		
5	Fri	1 0	1 40	20 5	5	0 6	0 43	16 4	4	5 47	6 32	8 27	9 4	8 27	9 4		
6	Sat	2 20	3 1	20 1	1	1 25	2 9	16 2	2	7 13	7 51	9 43	10 22	9 43	10 22		
7	Sun	3 42	4 24	21 4	4	2 51	3 30	17 0	0	8 28	9 2	11 2	11 40	11 2	11 40		
8	Mo	5 1	5 31	23 1	1	4 4	4 33	18 3	3	9 31	9 54	..	0 15	..	0 15		
9	Tu	5 59	6 24	24 11	11	4 59	5 25	19 6	6	10 17	10 38	0 45	1 10	0 45	1 10		
10	Wd	6 48	7 8	25 8	8	5 48	6 9	20 0	0	11 0	11 19	1 34	1 56	1 34	1 56		
11	Th	7 27	7 44	26 11	11	6 26	6 42	20 10	10	11 36	11 53	2 16	2 35	2 16	2 35		
12	Fri	8 0	8 17	27 10	10	6 59	7 16	21 5	5	..	0 10	2 52	3 8	2 52	3 8		
13	Sat	8 32	8 47	28 1	1	7 31	7 46	21 8	8	0 27	0 42	3 24	3 40	3 24	3 40		
14	Sun	9 1	9 17	28 1	1	8 1	8 17	21 8	8	0 58	1 13	3 55	4 10	3 55	4 10		
15	Mo	9 30	9 44	27 8	8	8 32	8 48	21 4	4	1 29	1 43	4 25	4 41	4 25	4 41		
16	Tu	9 59	10 12	26 9	9	9 4	9 20	20 9	9	1 58	2 14	4 55	5 11	4 55	5 11		
17	Wd	10 26	10 41	25 6	6	9 35	9 52	19 11	11	2 30	2 46	5 27	5 43	5 27	5 43		
18	Th	10 54	11 10	23 11	11	10 8	10 25	18 10	10	3 4	3 21	6 0	6 19	6 0	6 19		
19	Fri	11 30	11 53	22 3	3	10 45	11 7	17 7	7	3 40	4 4	6 37	6 57	6 37	6 57		
20	Sat	..	0 24	20 7	7	11 33	..	16 5	5	4 31	5 6	7 21	7 48	7 21	7 48		
21	Sun	0 57	1 38	19 11	11	0 3	0 41	16 0	0	5 43	6 29	8 22	9 0	8 22	9 0		
22	Mo	2 22	3 7	21 0	0	1 28	2 16	16 9	9	7 15	7 57	9 41	10 24	9 41	10 24		
23	Tu	3 51	4 32	23 8	8	3 0	3 38	18 8	8	8 35	9 8	11 8	11 48	11 8	11 48		
24	Wd	5 9	5 40	27 1	1	4 11	4 42	20 11	11	9 36	10 2	..	0 22	..	0 22		
25	Th	6 10	6 37	30 1	1	5 11	5 38	23 0	0	10 26	10 50	0 51	1 18	0 51	1 18		
26	Fri	7 3	7 29	31 5	5	6 4	6 28	24 1	1	11 14	11 39	1 44	2 7	1 44	2 7		
27	Sat	7 54	8 17	33 4	4	6 53	7 16	25 4	4	..	0 4	2 30	2 54	2 30	2 54		
28	Sun	8 38	9 0	33 8	8	7 37	8 0	25 7	7	0 27	0 49	3 18	3 40	3 18	3 40		

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 5th, 5h. 43m. a.m. | First Quarter. 21st, 5h. 54m. a.m.
 New Moön .. 13th, 8h. 47m. a.m. | Full Moon .. 27th, 9h. 53m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Monday..	7	48	8	8	29	3	9	41	10	0	17	7
2	Tuesday..	8	29	8	50	28	4	10	19	10	37	16	5
3	Wednesday	9	8	9	27	26	10	10	53	11	10	14	7
4	Thursday.	9	49	10	11	25	1	11	30	11	51	12	6
5	Friday ..	10	33	10	59	23	3	..	0	15	10	1	11
6	Saturday..	11	30	..	21	9		0	44	1	18	8	2
7	Sunday ..	0	9	0	54	21	3	2	1	2	43	7	6
8	Monday..	1	40	2	24	21	7	3	26	4	10	7	11
9	Tuesday..	3	4	3	36	23	0	4	54	5	29	9	9
10	Wednesday	4	0	4	24	24	3	5	53	6	19	11	4
11	Thursday.	4	48	5	10	25	5	6	42	7	4	12	10
12	Friday ..	5	27	5	42	25	10	7	22	7	37	13	4
13	Saturday..	5	59	6	14	26	6	7	56	8	11	14	2
14	Sunday ..	6	30	6	45	26	11	8	26	8	41	14	8
15	Monday..	6	59	7	15	27	1	8	55	9	10	14	11
16	Tuesday..	7	30	7	46	26	11	9	25	9	39	14	8
17	Wednesday	8	2	8	18	26	5	9	54	10	9	14	1
18	Thursday.	8	35	8	50	25	9	10	24	10	37	13	3
19	Friday ..	9	7	9	26	24	9	10	53	11	8	12	0
20	Saturday..	9	47	10	9	23	7	11	27	11	48	10	6
21	Sunday ..	10	33	11	2	22	5	..	0	15	9	1	11
22	Monday..	11	38	..	21	11		0	48	1	27	8	5
23	Tuesday..	0	23	1	11	22	6	2	14	2	59	9	2
24	Wednesday	1	58	2	39	24	0	3	43	4	26	11	0
25	Thursday.	3	14	3	47	26	0	5	5	5	40	13	6
26	Friday ..	4	16	4	41	27	9	6	9	6	35	15	9
27	Saturday..	5	7	5	32	28	7	7	2	7	26	16	9
28	Sunday ..	5	54	6	17	29	6	7	50	8	13	17	11
29	Monday..	6	40	7	0	29	9	8	36	8	56	18	3
30	Tuesday..	7	21	7	43	29	3	9	16	9	38	17	7
31	Wednesday	8	5	8	25	28	2	9	57	10	15	16	3

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 5th, 5h. 43m. a.m. | First Quarter. 21st, 5h. 54m. a.m.
 New Moon .. 13th, 8h. 47m. a.m. | Full Moon .. 27th, 9h. 33m. p.m.

No. D	WEEK DAYS.	Briton-Ferry.					Cardiff.					Gloucester.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H. M.	H. M.	H. M.	P. I.		H. M.	H. M.	H. M.	P. I.		H. M.	H. M.	H. M.	P. I.	
1	Monday..	8 23	8 43	24	1		9 13	9 32	33	0		10 6	10 25	31	9	
2	Tuesday..	9 4	9 25	22	11		9 51	10 9	31	6		10 44	11 2	29	11	
3	Wednesday	9 43	10 2	21	1		10 25	10 42	29	3		11 18	11 35	27	1	
4	Thursday..	10 24	10 46	18	11		11 2	11 23	26	6		11 55	..	23	7	
5	Friday ..	11 8	11 34	16	7		11 47	..	23	8		0 16	0 40	20	1	
6	Saturday..	..	0 5	14	8		0 16	0 50	21	3		1 9	1 43	17	1	
7	Sunday ..	0 44	1 29	14	0		1 33	2 15	20	6		2 26	3 8	16	1	
8	Monday..	2 15	2 59	14	5		2 58	3 42	21	0		3 51	4 35	16	9	
9	Tuesday..	3 39	4 11	16	3		4 26	5 1	23	3		5 19	5 54	19	7	
10	Wednesday	4 35	4 59	17	10		5 25	5 51	25	2		6 18	6 44	21	11	
11	Thursday..	5 23	5 45	19	4		6 14	6 36	27	0		7 7	7 29	24	3	
12	Friday ..	6 2	6 17	19	10		6 54	7 9	27	8		7 47	8 2	25	1	
13	Saturday..	6 34	6 49	20	8		7 28	7 43	28	9		8 21	8 36	26	5	
14	Sunday ..	7 5	7 20	21	2		7 58	8 13	29	5		8 51	9 6	27	3	
15	Monday..	7 34	7 50	21	5		8 27	8 43	29	8		9 20	9 36	27	7	
16	Tuesday..	8 5	8 21	21	2		8 57	9 11	29	5		9 50	10 4	27	3	
17	Wednesday	8 37	8 53	20	7		9 26	9 41	28	7		10 19	10 34	26	3	
18	Thursday..	9 10	9 25	19	9		9 56	10 9	27	6		10 49	11 2	24	11	
19	Friday ..	9 42	10 1	18	6		10 25	10 40	26	0		11 18	11 33	23	0	
20	Saturday..	10 22	10 44	17	0		10 59	11 20	24	2		11 52	..	20	8	
21	Sunday ..	11 8	11 37	15	7		11 47	..	22	4		0 13	0 40	18	5	
22	Monday..	..	0 13	14	11		0 20	0 59	21	6		1 13	1 52	17	5	
23	Tuesday..	0 58	1 46	15	8		1 46	2 31	22	6		2 39	3 24	18	7	
24	Wednesday	2 33	3 14	17	6		3 15	3 58	24	10		4 8	4 51	21	6	
25	Thursday..	3 49	4 22	20	0		4 37	5 12	28	0		5 30	6 5	25	5	
26	Friday ..	4 51	5 16	22	3		5 41	6 7	30	9		6 34	7 0	28	11	
27	Saturday..	5 42	6 7	23	3		6 34	6 58	31	11		7 27	7 51	30	6	
28	Sunday ..	6 29	6 52	24	5		7 22	7 45	33	5		8 15	8 38	32	3	
29	Monday..	7 15	7 35	24	9		8 8	8 28	33	9		9 1	9 21	32	8	
30	Tuesday..	7 56	8 18	24	1		8 48	9 10	33	0		9 41	10 3	31	9	
31	Wednesday	8 40	9 0	22	9		9 29	9 47	31	4		10 22	10 40	29	8	

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter.. 5th, 5h. 43m. a.m. | First Quarter. 21st, 5h. 54m. a.m.
 New Moon .. 13th, 8h. 47m. a.m. | Full Moon .. 27th, 9h. 33m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.						Llanelly.						Milford Haven.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	H. M.	F. I.	H. M.	F. I.	H. M.	H. M.	H. M.	F. I.	H. M.	F. I.	H. M.	H. M.	H. M.	F. I.	H. M.	F. I.
1	Monday..	7 58	8 18	23	2	8 33	8 53	23	8	8 33	8 53	22	8	8 33	8 53	22	9		
2	Tuesday..	8 39	9 02	22	2	9 14	9 35	22	8	9 14	9 35	21	10	9 14	9 35	21	10		
3	Wednesday	9 18	9 37	20	7	9 53	10 12	21	1	9 53	10 12	20	4	9 53	10 12	20	4		
4	Thursday..	9 59	10 21	18	8	10 34	10 56	19	2	10 34	10 56	18	7	10 34	10 56	18	7		
5	Friday ..	10 43	11 9	16	8	11 18	11 44	17	2	11 18	11 44	16	9	11 18	11 44	16	9		
6	Saturday..	11 40	..	15	0	..	0 15	15	6	..	0 15	15	3	..	0 15	15	3		
7	Sunday ..	0 19	1 4	14	5	0 54	1 39	14	11	0 54	1 39	14	9	0 54	1 39	14	9		
8	Monday..	1 50	2 34	14	9	2 25	3 9	15	3	2 25	3 9	15	1	2 25	3 9	15	1		
9	Tuesday..	3 14	3 46	16	4	3 49	4 21	16	10	3 49	4 21	16	6	3 49	4 21	16	6		
10	Wednesday	4 10	4 34	17	9	4 45	5 9	18	3	4 45	5 9	17	9	4 45	5 9	17	9		
11	Thursday	4 58	5 20	19	0	5 33	5 55	19	6	5 33	5 55	18	11	5 33	5 55	18	11		
12	Friday ..	5 37	5 52	19	6	6 12	6 27	20	0	6 12	6 27	19	4	6 12	6 27	19	4		
13	Saturday..	6 9	6 24	20	2	6 44	6 59	20	8	6 44	6 59	20	0	6 44	6 59	20	0		
14	Sunday ..	6 40	6 55	20	8	7 15	7 30	21	2	7 15	7 30	20	5	7 15	7 30	20	5		
15	Monday..	7 9	7 25	20	10	7 44	8 0	21	4	7 44	8 0	20	7	7 44	8 0	20	7		
16	Tuesday..	7 40	7 56	20	8	8 15	8 31	21	2	8 15	8 31	20	5	8 15	8 31	20	5		
17	Wednesday	8 12	8 28	20	1	8 47	9 3	20	7	8 47	9 3	19	11	8 47	9 3	19	11		
18	Thursday..	8 45	9 0	19	5	9 20	9 35	19	11	9 20	9 35	19	3	9 20	9 35	19	3		
19	Friday ..	9 18	9 36	18	4	9 52	10 11	18	10	9 52	10 11	18	3	9 52	10 11	18	3		
20	Saturday..	9 56	10 19	17	0	10 32	10 54	17	6	10 32	10 54	17	1	10 32	10 54	17	1		
21	Sunday ..	10 43	11 12	15	9	11 18	11 47	16	3	11 18	11 47	15	11	11 18	11 47	15	11		
22	Monday..	11 48	..	15	2	..	0 23	15	8	..	0 23	15	5	..	0 23	15	5		
23	Tuesday..	0 33	1 21	15	10	1 8	1 56	16	4	1 8	1 56	16	0	1 8	1 56	16	0		
24	Wednesday	2 8	2 49	17	6	2 43	3 24	18	0	2 43	3 24	17	6	2 43	3 24	17	6		
25	Thursday..	3 24	3 57	19	8	3 59	4 32	20	2	3 59	4 32	19	6	3 59	4 32	19	6		
26	Friday ..	4 26	4 51	21	7	5 1	5 26	22	1	5 1	5 26	21	3	5 1	5 26	21	3		
27	Saturday..	5 17	5 42	22	6	5 52	6 17	23	0	5 52	6 17	23	1	5 52	6 17	23	1		
28	Sunday ..	6 4	6 27	23	6	6 39	7 2	24	0	6 39	7 2	23	0	6 39	7 2	23	0		
29	Monday..	6 50	7 10	23	9	7 25	7 45	24	3	7 25	7 45	23	3	7 25	7 45	23	3		
30	Tuesday..	7 31	7 53	23	2	8 6	8 28	23	8	8 6	8 28	23	9	8 6	8 28	23	9		
31	Wednesday	8 15	8 35	22	0	8 50	9 10	22	6	8 50	9 10	21	8	8 50	9 10	21	8		

The above are in Greenwich Mean Time, if local Time be required for
 Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 5th, 5h. 43m. a.m. | First Quarter. 21st, 5h. 54m. a.m.
 New Moon .. 13th, 8h. 47m. a.m. | Full Moon .. 27th, 9h. 33m. p.m.

M. D.	W. D.	Newport.					Swansea.					Liverpool.				London.			
		Morn.		Even.		Height	Morn		Even.		Height	Morn.		Even.		Morn.		Even.	
		H. M.	H. M.	H. M.	P. I.		H. M.	H. M.	H. M.	P. I.		H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	Mo	9 21	9 40	33	0		8 23	8 43	25	1		1 12	1 34	4	1	4 24			
2	Tu	9 59	10 17	31	3		9 4	9 25	23	11		1 53	2 14	4 46	5	6			
3	Wd	10 33	10 50	28	7		9 43	10 22	22	1		2 35	2 54	5 27	5	49			
4	Th	11 10	11 31	25	6		10 24	10 46	19	11		3 15	3 39	6 9	6	31			
5	Fri	11 55	..	22	3		11 8	11 34	17	7		4 6	4 33	6 56	7	22			
6	Sat	0 24	0 58	19	5		..	0 5	15	8		5 7	5 45	7 50	8	23			
7	Sun	1 41	2 23	18	7		0 44	1 29	15	0		6 33	7 16	9 2	9	44			
8	Mo	3 6	3 50	19	2		2 15	2 59	15	5		7 50	8 34	10 25	11	7			
9	Tu	4 34	5 9	21	10		3 39	4 11	17	3		9 9	9 36	11 47	..				
10	Wd	5 33	5 59	23	11		4 35	4 59	18	10		9 56	10 17	0 23	0	51			
11	Th	6 22	6 44	26	1		5 23	5 45	20	4		10 36	10 56	1 12	1	34			
12	Fri	7 2	7 17	26	11		6 2	6 17	20	10		11 13	11 27	1 54	2	13			
13	Sat	7 36	7 51	28	1		6 34	6 49	21	8		11 45	12 0	2 29	2	43			
14	Sun	8 6	8 21	28	9		7 5	7 20	22	2		..	0 16	3 0	3	15			
15	Mo	8 35	8 50	29	1		7 31	7 50	22	5		0 31	0 45	3 30	3	44			
16	Tu	9 5	9 19	28	9		8 5	8 21	22	2		1 2	1 17	3 58	4	14			
17	Wd	9 34	9 49	27	11		8 37	8 53	21	7		1 32	1 48	4 29	4	44			
18	Th	10 4	10 17	26	9		9 10	9 25	20	9		2 3	2 20	5 0	5	16			
19	Fri	10 33	10 48	24	11		9 42	10 1	19	6		2 35	2 54	5 33	5	49			
20	Sat	11 7	11 28	22	10		10 22	10 44	18	0		3 13	3 36	6 9	6	29			
21	Sun	11 55	..	20	9		11 8	11 37	16	7		4 2	4 33	6 53	7	19			
22	Mo	0 28	1 7	19	9		..	0 13	15	11		5 11	5 55	7 50	8	27			
23	Tu	1 54	2 39	20	11		0 58	1 46	16	8		6 47	7 32	9 11	9	57			
24	Wd	3 23	4 6	23	6		2 33	3 14	18	6		8 12	8 48	10 41	11	24			
25	Th	4 45	5 20	27	3		3 49	4 22	21	0		9 18	9 45	..	0	1			
26	Fri	5 49	6 15	30	4		4 51	5 16	23	3		10 9	10 30	0 32	1	0			
27	Sat	6 42	7 6	31	8		5 42	6 7	24	3		10 51	11 17	1 26	1	48			
28	Sun	7 30	7 53	33	6		6 29	6 52	25	5		11 40	..	2 11	2	33			
29	Mo	8 16	8 36	33	10		7 15	7 35	25	9		0 3	0 26	2 55	3	17			
30	Tu	8 56	9 18	33	0		7 56	8 18	25	1		0 46	1 8	3 39	3	59			
31	Wd	9 37	9 55	31	1		8 40	9 0	23	9		1 30	1 51	4 20	4	42			

The above are in Greenwich Mean Time, if local time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 3rd, 8h. 48m. p.m. | First Quarter. 19th, 3h. 6m. p.m.
 New Moon .. 12th, 1h. 48m. a.m. | Full Moon .. 28th, 6h. 21m. a.m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgewater.					Bristol.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H. M.	H. M.	F. I	F. I		H. M.	H. M.	F. I.	F. I.		H. M.	H. M.	F. I.	F. I.	
1	Thursday.	8 46	9 5	26	9		10 33	10 51	14	6		10 13	10 31	28	2	
2	Friday ..	9 26	9 47	24	11		11 9	11 27	12	2		10 49	11 7	24	10	
3	Saturday ..	10 10	10 33	23	1		11 49	..	9	11		11 29	11 55	21	7	
4	Sunday ..	11 2	11 35	21	8		0 15	0 47	8	0		..	0 27	18	10	
5	Monday..	..	0 16	20	11		1 24	2 8	7	1		1 4	1 48	17	6	
6	Tuesday..	1 4	1 46	21	5		2 52	3 32	7	9		2 32	3 12	18	6	
7	Wednesday	2 26	2 59	22	6		4 12	4 49	9	2		3 52	4 29	20	6	
8	Thursday.	3 25	3 50	23	11		5 17	5 43	10	11		4 57	5 23	23	0	
9	Friday ..	4 2	4 33	25	1		6 6	6 27	12	5		5 46	6 7	25	2	
10	Saturday..	4 51	5 10	26	1		6 45	7 4	13	8		6 25	6 44	27	0	
11	Sunday ..	5 25	5 42	26	5		7 20	7 37	14	1		7 0	7 17	27	8	
12	Monday..	5 58	6 13	27	0		7 55	8 10	14	9		7 35	7 50	28	8	
13	Tuesday..	6 30	6 46	27	3		8 26	8 42	15	1		8 6	8 22	29	2	
14	Wednesday	7 2	7 18	27	1		8 58	9 14	14	11		8 38	8 54	28	10	
15	Thursday.	7 35	7 52	26	8		9 30	9 45	14	4		9 10	9 25	28	1	
16	Friday ..	8 11	8 29	26	0		10 3	10 19	13	6		9 43	9 59	26	10	
17	Saturday..	8 49	9 9	25	0		10 36	10 54	12	3		10 16	10 34	25	0	
18	Sunday ..	9 32	9 55	23	11		11 14	11 35	10	11		10 54	11 15	23	0	
19	Monday..	10 22	10 51	22	10		..	0 2	9	7		11 42	..	21	1	
20	Tuesday..	11 25	..	22	4		0 36	1 13	8	11		0 16	0 53	20	2	
21	Wednesday	0 6	0 49	22	11		1 56	2 39	9	8		1 36	2 19	21	3	
22	Thursday.	1 35	2 15	24	3		3 22	4 1	11	4		3 2	3 41	23	7	
23	Friday ..	2 48	3 19	26	0		4 36	5 11	13	6		4 16	4 51	26	10	
24	Saturday	3 49	4 16	27	7		5 42	6 9	15	6		5 22	5 49	29	10	
25	Sunday ..	4 41	5 4	28	7		6 35	6 58	16	9		6 15	6 38	31	6	
26	Monday..	5 30	5 53	28	11		7 24	7 49	17	2		7 4	7 29	32	2	
27	Tuesday..	6 13	6 38	29	1		8 10	8 34	17	5		7 50	8 14	32	6	
28	Wednesday	6 58	7 19	28	7		8 54	9 15	16	9		8 34	8 55	31	6	
29	Thursday.	7 39	8 1	27	7		9 34	9 53	15	6		9 14	9 33	29	10	
30	Friday ..	8 20	8 42	26	4		10 11	10 30	13	11		9 51	10 10	27	6	

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 3rd, 8h. 48m. p.m. | First Quarter. 19th, 3h. 6m. p.m.
 New Moon .. 12th, 1h. 48m. a.m. | Full Moon .. 26th, 6h. 21m. a.m.

d.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.	Even.	Height		Morn.	Even.	Height		Morn.	Even.	Height	
		H. M.	H. M. P.	I.		H. M.	H. M. P.	I.		H. M.	H. M. P.	I.	
1	Thursday.	9 21	9 40	21	0	10 5	10 23	29	1	10 58	11 16	26	11
2	Friday ..	10 1	10 22	18	8	10 41	10 59	26	3	11 34	11 52	23	4
3	Saturday.	10 45	11 8	16	5	11 21	11 47	23	5	..	0 14	19	9
4	Sunday ..	11 37	..	14	6	..	0 19	21	1	0 40	1 12	16	11
5	Monday..	0 10	0 51	13	7	0 56	1 40	20	0	1 49	2 33	15	5
6	Tuesday..	1 39	2 21	14	3	2 24	3 4	20	9	3 17	3 57	16	5
7	Wednesday	3 1	3 34	15	8	3 44	4 21	22	6	4 37	5 14	18	7
8	Thursday.	4 0	4 25	17	5	4 49	5 15	24	8	5 42	6 8	21	4
9	Friday ..	4 47	5 8	18	11	5 38	5 59	26	6	6 31	6 52	23	7
10	Saturday..	5 26	5 45	20	2	6 17	6 36	28	1	7 10	7 29	25	7
11	Sunday ..	6 0	6 17	20	7	6 52	7 9	28	7	7 45	8 2	26	3
12	Monday..	6 33	6 48	21	3	7 27	7 42	29	6	8 20	8 35	27	5
13	Tuesday..	7 5	7 21	21	7	7 58	8 14	29	11	8 51	9 7	27	11
14	Wednesday	7 37	7 53	21	5	8 30	8 46	29	8	9 23	9 39	27	7
15	Thursday.	8 10	8 27	20	10	9 2	9 17	29	0	9 55	10 10	26	9
16	Friday ..	8 46	9 4	20	0	9 35	9 51	28	0	10 26	10 41	25	5
17	Saturday..	9 24	9 44	18	9	10 8	10 26	26	5	11 1	11 19	23	6
18	Sunday ..	10 7	10 30	17	5	10 46	11 7	24	8	11 39	12 0	21	4
19	Monday..	10 57	11 26	16	1	11 34	..	23	0	..	0 27	19	3
20	Tuesday..	12 0	..	15	5	0 8	0 45	22	3	1 1	1 38	18	4
21	Wednesday	0 40	1 24	16	2	1 28	2 11	23	2	2 21	3 4	19	5
22	Thursday	2 10	2 50	17	10	2 54	3 33	25	2	3 47	4 26	21	11
23	Friday ..	3 23	3 54	20	0	4 8	4 43	28	0	5 1	5 36	25	5
24	Saturday.	4 24	4 51	22	0	5 14	5 41	30	6	6 7	6 34	28	7
25	Sunday ..	5 16	5 39	23	3	6 7	6 30	31	11	7 0	7 23	30	5
26	Monday..	6 5	6 28	23	8	6 56	7 21	32	6	7 49	8 14	31	1
27	Tuesday..	6 48	7 13	23	11	7 42	8 6	32	9	8 35	8 59	31	5
28	Wednesday	7 33	7 54	23	3	8 26	8 47	31	11	9 19	9 40	30	5
29	Thursday.	8 14	8 36	22	0	9 6	9 25	30	6	9 59	10 18	28	7
30	Friday ..	8 55	9 17	20	5	9 43	10 2	28	6	10 36	10 55	26	1

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 3rd, 8h. 48m. p.m. | First Quarter. 19th, 3h. 6m. p.m.
 New Moon .. 12th, 1h. 48m. a.m. | Full Moon .. 26th, 6h. 21m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.					Llanelly.					Milford Haven.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H. M.	H. M.	F. I.	F. I.		H. M.	H. M.	F. I.	F. I.		H. M.	H. M.	F. I.	F. I.	
1	Thursday.	8 55	9 15	20	6		9 31	9 50	21	0		9 31	9 50	20	3	
2	Friday ..	9 36	9 57	18	6		10 11	10 32	19	0		10 11	10 32	18	5	
3	Saturday..	10 19	10 43	16	6		10 55	11 18	17	0		10 55	11 18	16	7	
4	Sunday ..	11 11	11 45	14	10		11 47	..	15	4		11 47	..	15	2	
5	Monday..	..	0 26	14	0		0 20	1 14	6			0 20	1 14	5		
6	Tuesday..	1 14	1 56	14	7		1 49	2 31	15	1		1 49	2 31	14	11	
7	Wednesday	2 36	3 9	15	10		3 11	3 44	16	4		3 11	3 44	16	0	
8	Thursday.	3 35	4 0	17	5		4 10	4 35	17	11		4 10	4 35	17	5	
9	Friday ..	4 22	4 43	18	8		4 57	5 18	19	2		4 57	5 18	18	7	
10	Saturday..	5 1	5 20	19	9		5 36	5 55	20	3		5 36	5 55	19	7	
11	Sunday ..	5 35	5 52	20	1		6 10	6 27	20	7		6 10	6 27	19	11	
12	Monday..	6 8	6 23	20	9		6 43	6 58	21	3		6 43	6 58	20	6	
13	Tuesday..	6 40	6 56	21	0		7 15	7 31	21	6		7 15	7 31	20	9	
14	Wednesday	7 12	7 28	20	10		7 47	8 3	21	4		7 47	8 3	20	7	
15	Thursday.	7 45	8 2	20	4		8 20	8 37	20	10		8 20	8 37	20	2	
16	Friday ..	8 21	8 39	19	8		8 56	9 14	20	2		8 56	9 14	19	6	
17	Saturday..	8 59	9 19	18	7		9 34	9 54	19	1		9 34	9 54	18	6	
18	Sunday ..	9 42	10 5	17	5		10 17	10 40	17	11		10 17	10 40	17	3	
19	Monday ..	10 32	11 1	16	2		11 7	11 36	16	8		11 7	11 36	16	4	
20	Tuesday..	11 35	..	15	8		..	0 10	16	2		..	0 10	15	10	
21	Wednesday	0 15	0 59	16	3		0 50	1 34	16	9		0 50	1 34	16	5	
22	Thursday.	1 45	2 25	17	9		2 20	3 0	18	3		2 20	3 0	17	9	
23	Friday ..	2 58	3 29	19	8		3 33	4 4	20	2		3 33	4 4	19	6	
24	Saturday..	3 59	4 26	21	5		4 34	5 1	21	11		4 34	5 1	21	1	
25	Sunday ..	4 51	5 14	22	6		5 26	5 49	23	0		5 26	5 49	22	1	
26	Monday..	5 40	6 3	22	10		6 15	6 38	23	4		6 15	6 38	22	5	
27	Tuesday..	6 23	6 48	23	0		6 58	7 23	23	6		6 58	7 23	23	7	
28	Wednesday	7 8	7 29	22	6		7 43	8 4	23	0		7 43	8 4	22	1	
29	Thursday.	7 49	8 11	21	5		8 24	8 46	21	11		8 24	8 46	21	1	
30	Friday ..	8 30	8 52	20	0		9 5	9 27	20	6		9 5	9 27	19	10	

The above are in Greenwich Mean Time, if local Time be required for
 Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 3rd, 8h. 48m. p.m. | First Quarter. 19th, 3h. 6m. p.m.
 New Moon .. 12th, 1h. 48m. a.m. | Full Moon .. 26th, 6h. 21m. a.m.

M.	W.	Newport.				Swansea.				Liverpool.		London.			
		Morn.	Even.	Height		Morn.	Even.	Height		Morn.	Even.	Morn.	Even.		
D.	D.	H. M.	H. M.	F. I.		H. M.	H. M.	F. I.		H. M.	H. M.	H. M.	H. M.		
1	Th	10 18	10 31	28 5		9 21	9 40	22 0		2 10	2 31	5 3	5 23		
2	Fri	10 49	11 7	25 2		10 1	10 22	19 8		2 51	3 14	5 44	6 6		
3	Sat	11 29	11 55	22 0		10 45	11 8	17 5		3 36	4 3	6 30	6 53		
4	Sun	..	0 27	19 3		11 37	..	15 6		4 33	5 10	7 20	7 50		
5	Mo	1 4	1 48	18 0		0 10	0 51	14 7		5 51	6 41	8 26	9 8		
6	Tu	2 32	3 12	18 10		1 39	2 21	15 3		7 25	8 2	9 51	10 34		
7	Wd	3 52	4 29	20 11		3 1	3 34	16 8		8 36	9 5	11 13	11 49		
8	Th	4 57	5 23	23 4		4 0	4 25	18 5		9 28	9 48	..	0 19		
9	Fri	5 46	6 7	25 6		4 47	5 8	19 11		10 7	10 24	0 42	1 3		
10	Sat	6 25	6 44	27 4		5 26	5 45	21 2		10 39	10 56	1 23	1 41		
11	Sun	7 0	7 17	27 11		6 0	6 17	21 7		11 11	11 27	1 57	2 13		
12	Mo	7 35	7 50	28 11		6 33	6 48	22 3		11 44	11 59	2 27	2 43		
13	Tu	8 6	8 22	29 5		7 5	7 21	22 7		..	0 16	2 59	3 14		
14	Wd	8 38	8 54	29 1		7 37	7 53	22 5		0 32	0 49	3 30	3 45		
15	Th	9 10	9 25	28 4		8 10	8 27	21 10		1 5	1 22	4 1	4 17		
16	Fri	9 43	9 59	27 3		8 46	9 4	21 0		1 38	1 56	4 34	4 50		
17	Sat	10 16	10 34	25 4		9 24	9 44	19 9		2 14	2 34	5 9	5 27		
18	Sun	10 54	11 15	23 4		10 7	10 30	18 5		2 55	3 20	5 48	6 10		
19	Mo	11 42	..	21 6		10 57	11 26	17 1		3 46	4 18	6 36	7 3		
20	Tu	0 16	0 53	20 7		12 0	..	16 5		4 57	5 39	7 35	8 13		
21	Wd	1 36	2 19	21 8		0 40	1 24	17 2		6 27	7 12	8 56	9 39		
22	Th	3 2	3 41	23 11		2 10	2 50	18 10		7 52	8 27	10 21	11 3		
23	Fri	4 16	4 51	27 3		3 23	3 54	21 0		8 56	9 23	11 39	..		
24	Sat	5 22	5 49	30 1		4 24	4 51	23 0		9 47	10 9	0 9	0 37		
25	Sun	6 15	6 38	31 8		5 16	5 39	24 3		10 30	10 51	1 2	1 26		
26	Mo	7 4	7 29	32 4		6 5	6 28	24 8		11 15	11 39	1 48	2 8		
27	Tu	7 50	8 14	32 8		6 48	7 13	24 11		11 59	..	2 31	2 54		
28	Wd	8 34	8 55	31 8		7 33	7 54	24 3		0 24	0 44	3 14	3 37		
29	Th	9 14	9 33	30 1		8 14	8 36	23 0		1 6	1 26	3 57	4 18		
30	Fri	9 51	10 10	27 10		8 55	9 17	21 5		1 47	2 5	4 38	4 59		

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 3rd, 1h. 41m. p.m. | First Quarter. 18th, 9h. 30m. p.m.
 New Moon .. 11th, 4h. 7m. p.m. | Full Moon .. 25th, 5h. 23m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.
1	Saturday ..	9 3	9 25	24	9	10 49	11 7	12	0	10 29	10 47	24	6
2	Sunday ..	9 47	10 10	23	3	11 27	11 49	10	1	11 7	11 29	21	10
3	Monday ..	10 33	11 3	21	11	..	0 15	8	5	11 55	..	19	4
4	Tuesday ..	11 35	..	21	2	0 49	1 24	7	5	0 29	1 4	18	0
5	Wednesday ..	0 10	0 50	21	4	2 2	2 40	7	7	1 42	2 20	18	4
6	Thursday ..	1 31	2 6	22	2	3 17	3 51	8	9	2 57	3 31	19	11
7	Friday ..	2 37	3 4	23	5	4 24	4 54	10	4	4 4	4 34	22	2
8	Saturday ..	3 27	3 49	24	8	5 19	5 42	11	10	4 59	5 22	24	4
9	Sunday ..	4 10	4 29	25	8	6 4	6 23	13	1	5 44	6 3	26	2
10	Monday ..	4 48	5 6	26	5	6 42	7 1	14	1	6 22	6 41	27	8
11	Tuesday ..	5 26	5 46	26	7	7 21	7 42	14	3	7 1	7 22	28	0
12	Wednesday ..	6 2	6 20	26	11	7 59	8 16	14	8	7 39	7 56	28	6
13	Thursday ..	6 36	6 54	27	0	8 32	8 50	14	9	8 12	8 30	28	8
14	Friday ..	7 13	7 32	26	9	9 9	9 27	14	6	8 49	9 7	28	2
15	Saturday ..	7 53	8 14	26	3	9 46	10 6	13	10	9 26	9 46	27	4
16	Sunday ..	8 36	8 58	25	5	10 25	10 46	12	10	10 5	10 26	25	9
17	Monday ..	9 23	9 49	24	6	11 6	11 30	11	8	10 46	11 10	24	0
18	Tuesday ..	10 16	10 45	23	7	11 56	..	10	6	11 36	..	22	5
19	Wednesday ..	11 16	11 50	23	1	0 28	1 4	9	11	0 8	0 44	21	7
20	Thursday ..	..	0 26	23	5	1 40	2 17	10	4	1 20	1 57	22	2
21	Friday ..	1 5	1 42	24	4	2 53	3 28	11	5	2 33	3 8	23	9
22	Saturday ..	2 16	2 47	25	8	4 2	4 35	13	1	3 42	4 15	26	2
23	Sunday ..	3 17	3 49	26	10	5 9	5 42	14	7	4 49	5 22	28	4
24	Monday ..	4 17	4 43	27	7	6 11	6 37	15	6	5 51	6 17	29	10
25	Tuesday ..	5 10	5 34	27	11	7 4	7 28	15	11	6 44	7 8	30	5
26	Wednesday ..	5 56	6 17	28	0	7 52	8 13	16	0	7 32	7 53	30	6
27	Thursday ..	6 40	6 59	27	8	8 36	8 55	15	7	8 16	8 35	29	11
28	Friday ..	7 20	7 40	26	11	9 16	9 35	14	8	8 56	9 15	28	6
29	Saturday ..	8 1	8 22	26	0	9 53	10 13	13	6	9 33	9 53	26	10
30	Sunday ..	8 43	9 2	24	10	10 31	10 48	12	1	10 11	10 28	24	8
31	Monday ..	9 24	9 46	23	8	11 7	11 26	10	7	10 47	11 6	22	7

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 3rd, 1h. 41m. p.m. | First Quarter. 18th, 9h. 30m. p.m.
 New Moon .. 11th, 4h. 7m. p.m. | Full Moon .. 25th, 3h. 23m. p.m.

N. O.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.
1	Saturday..	9 38	10 0	18 6	6	10 21	10 39	26 0	0	11 14	11 32	23 0	0
2	Sunday ..	10 22	10 45	16 7	7	10 59	11 21	23 8	8	11 52	..	20 1	1
3	Monday..	11 8	11 38	14 11	11	11 47	..	21 6	6	0 14	0 40	17 5	5
4	Tuesday..	..	0 10	13 11	11	0 21	0 56	20 5	5	1 14	1 49	16 0	0
5	Wednesday	0 45	1 25	14 1	1	1 34	2 12	20 7	7	2 27	3 5	16 3	3
6	Thursday.	2 6	2 41	15 3	3	2 49	3 23	22 0	0	3 42	4 16	18 0	0
7	Friday ..	3 12	3 39	16 10	10	3 56	4 26	23 11	11	4 49	5 19	20 5	5
8	Saturday..	4 2	4 24	18 4	4	4 51	5 14	25 10	10	5 44	6 7	22 9	9
9	Sunday ..	4 45	5 4	19 7	7	5 36	5 55	27 5	5	6 29	6 48	24 9	9
10	Monday..	5 23	5 41	20 7	7	6 14	6 33	28 7	7	7 7	7 26	26 3	3
11	Tuesday..	6 1	6 21	20 9	9	6 53	7 14	28 11	11	7 46	8 7	26 7	7
12	Wednesday	6 37	6 55	21 2	2	7 31	7 48	29 5	5	8 24	8 41	27 3	3
13	Thursday.	7 11	7 29	21 3	3	8 4	8 22	29 6	6	8 57	9 15	27 5	5
14	Friday ..	7 48	8 7	21 0	0	8 41	8 59	29 1	1	9 34	9 52	26 11	11
15	Saturday..	8 28	8 49	20 4	4	9 18	9 38	28 4	4	10 11	10 31	25 11	11
16	Sunday ..	9 11	9 33	19 4	4	9 57	10 18	27 0	0	10 50	11 11	24 3	3
17	Monday...	9 58	10 24	18 2	2	10 38	11 2	25 6	6	11 31	11 55	22 5	5
18	Tuesday..	10 51	11 20	17 0	0	11 28	12 0	24 2	2	..	0 21	20 8	8
19	Wednesday	11 51	..	16 5	5	..	0 36	23 5	5	0 53	1 29	19 9	9
20	Thursday.	0 25	1 1	16 10	10	1 12	1 49	23 11	11	2 5	2 42	20 5	5
21	Friday ..	1 40	2 17	17 11	11	2 25	3 0	25 3	3	3 18	3 53	22 1	1
22	Saturday..	2 51	3 22	19 7	7	3 34	4 7	27 5	5	4 27	5 0	24 9	9
23	Sunday ..	3 52	4 24	21 1	1	4 41	5 14	29 3	3	5 34	6 7	27 1	1
24	Monday..	4 52	5 18	22 0	0	5 43	6 9	30 6	6	6 36	7 2	28 7	7
25	Tuesday..	5 45	6 9	22 5	5	6 36	7 0	31 0	0	7 29	7 53	29 3	3
26	Wednesday	6 31	6 52	22 6	6	7 24	7 45	31 1	1	8 17	8 38	29 5	5
27	Thursday.	7 15	7 34	22 1	1	8 8	8 27	30 7	7	9 1	9 20	28 9	9
28	Friday ..	7 55	8 15	21 2	2	8 48	9 7	29 5	5	9 41	10 0	27 3	3
29	Saturday..	8 36	8 57	20 0	0	9 25	9 45	28 0	0	10 18	10 38	25 5	5
30	Sunday ..	9 18	9 37	18 7	7	10 3	10 20	26 1	1	10 56	11 13	23 1	1
31	Monday..	9 59	10 21	17 1	1	10 39	10 58	24 3	3	11 32	11 51	20 10	10

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter.. 3rd, 1h. 41m. p.m. | First Quarter. 18th, 9h. 30m. p.m.
 New Moon .. 11th, 4h. 7m. p.m. | Full Moon .. 25th, 3h. 23m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.						Llanelly.						Milford Haven.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Saturday..	9	13	9	35	18	4	9	48	10	10	18	10	9	48	10	10	18	3
2	Sunday ..	9	56	10	20	16	8	10	32	10	55	17	2	10	32	10	55	16	9
3	Monday..	10	43	11	13	15	2	11	18	11	48	15	8	11	18	11	48	15	5
4	Tuesday..	11	45	..	..	14	4	..	0	20	14	10	..	..	0	20	14	5	5
5	Wednesday	0	20	1	0	14	6	0	55	1	35	15	0	0	55	1	35	14	10
6	Thursday.	1	41	2	16	15	6	2	16	2	51	16	0	2	16	2	51	15	8
7	Friday ..	2	47	3	14	16	10	3	22	3	49	17	4	3	22	3	49	16	11
8	Saturday..	3	37	3	59	18	2	4	12	4	34	18	8	4	12	4	34	18	2
9	Sunday ..	4	20	4	39	19	3	4	55	5	14	19	9	4	55	5	14	19	2
10	Monday..	4	58	5	16	20	1	5	33	5	51	20	7	5	33	5	51	19	11
11	Tuesday..	5	36	5	56	20	3	6	11	6	31	20	9	6	11	6	31	20	1
12	Wednesday	6	12	6	30	20	8	6	47	7	5	21	2	6	47	7	5	20	5
13	Thursday.	6	46	7	4	20	9	7	21	7	39	21	3	7	21	7	39	20	6
14	Friday ..	7	23	7	42	20	6	7	58	8	17	21	0	7	58	8	17	20	3
15	Saturday..	8	3	8	25	19	11	8	38	8	59	20	5	8	38	8	59	19	9
16	Sunday ..	8	46	9	8	19	0	9	21	9	43	19	6	9	21	9	43	18	11
17	Monday..	9	33	9	59	18	0	10	8	10	34	18	6	10	8	10	34	18	9
18	Tuesday..	10	26	10	55	17	0	11	1	11	30	17	6	11	1	11	30	17	1
19	Wednesday	11	26	12	0	16	6	..	0	1	17	0	..	..	0	1	16	7	7
20	Thursday.	..	..	0	36	16	10	0	35	1	11	17	4	0	35	1	11	16	11
21	Friday ..	1	15	1	52	17	10	1	50	2	27	18	4	1	50	2	27	17	10
22	Saturday..	2	26	2	57	19	3	3	1	3	32	19	9	3	1	3	32	19	2
23	Sunday ..	3	27	3	59	20	7	4	2	4	34	21	1	4	2	4	34	20	4
24	Monday..	4	27	4	53	21	5	5	2	5	28	21	11	5	2	5	28	21	1
25	Tuesday..	5	20	5	44	21	9	5	55	6	19	22	3	5	55	6	19	21	5
26	Wednesday	6	6	6	27	21	10	6	41	7	2	22	4	6	41	7	2	21	6
27	Thursday.	6	50	7	9	21	6	7	25	7	44	22	0	7	25	7	44	21	2
28	Friday ..	7	30	7	50	20	8	8	5	8	25	21	2	8	5	8	25	20	5
29	Saturday..	8	11	8	32	19	8	8	46	9	7	20	2	8	46	9	7	19	6
30	Sunday ..	8	53	9	12	18	5	9	28	9	47	18	11	9	28	9	47	18	4
31	Monday..	9	34	9	56	17	1	10	9	10	31	17	7	10	9	10	31	17	2

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

ast Quarter. 3rd, 1h. 41m. p.m. | First Quarter. 18th, 9h. 30m. p.m.
 ew Moon .. 11th, 4h. 7m. p.m. | Full Moon .. 25th, 3h. 23m. p.m.

W. D.	Newport.						Swansea.						Liverpool.				London.			
	Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Morn.		Even.	
	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.	H.	M.
1 Sat	10	29	10	47	24	11	9	38	10	0	19	6	2	27	2	49	5	18	5	40
2 Sun	11	7	11	29	22	3	10	22	10	45	17	7	3	12	3	36	6	4	6	28
3 Mo	11	55	..	19	9		11	8	11	38	15	11	4	3	4	33	6	53	7	20
4 Tu	0	29	1	4	18	5	..	0	10	14	11		5	12	5	51	7	50	8	28
5 Wd	1	42	2	20	18	8	0	45	1	25	15	1	6	34	7	13	9	8	9	45
6 Th	2	57	3	31	20	3	2	6	2	41	16	3	7	49	8	19	10	22	10	59
7 Fri	4	4	4	34	22	7	3	12	3	39	17	10	8	46	9	9	11	31	11	59
8 Sat	4	59	5	22	24	9	4	2	4	24	19	4	9	29	9	47	..	0	23	
9 Sun	5	44	6	3	26	7	4	45	5	4	20	7	10	5	10	21	0	43	1	2
10 Mo	6	22	6	41	27	11	5	23	5	41	21	7	10	36	10	53	1	21	1	38
11 Tu	7	1	7	22	28	3	6	1	6	21	21	9	11	12	11	31	1	54	2	10
12 Wd	7	39	7	56	28	9	6	37	6	55	22	2	11	48	..		2	28	2	47
13 Th	8	12	8	30	28	11	7	11	7	29	22	3	0	6	0	22	3	3	3	20
14 Fri	8	49	9	7	28	5	7	48	8	7	22	0	0	40	1	0	3	36	3	53
15 Sat	9	26	9	46	27	8	8	28	8	49	21	4	1	19	1	39	4	12	4	31
16 Sun	10	5	10	26	26	1	9	11	9	33	20	4	2	0	2	21	4	51	5	13
17 Mo	10	46	11	10	24	4	9	58	10	24	19	2	2	44	3	10	5	34	5	58
18 Tu	11	36	..	22	10		10	51	11	20	18	0	3	39	4	11	6	26	6	56
19 Wd	0	8	0	44	22	0	11	51	..	17	5		4	49	5	28	7	28	8	5
20 Th	1	20	1	57	22	7	0	25	1	1	17	10	6	10	6	50	8	45	9	24
21 Fri	2	33	3	8	24	0	1	40	2	17	18	11	7	26	7	58	10	0	10	35
22 Sat	3	42	4	15	26	7	2	51	3	22	20	7	8	28	8	55	11	9	11	40
23 Sun	4	49	5	22	28	7	3	52	4	24	22	1	9	21	9	47	..	0	8	
24 Mo	5	51	6	17	30	1	4	52	5	18	23	0	10	10	10	32	0	35	1	2
25 Tu	6	44	7	8	30	8	5	45	6	9	23	5	10	56	11	19	1	27	1	50
26 Wd	7	32	7	53	30	9	6	31	6	52	23	6	11	42	..		2	13	2	35
27 Th	8	16	8	35	30	2	7	15	7	34	23	1	0	3	0	26	2	57	3	17
28 Fri	8	56	9	15	28	9	7	55	8	15	22	2	0	45	1	7	3	39	3	58
29 Sat	9	33	9	53	27	3	8	36	8	57	21	0	1	27	1	47	4	19	4	39
30 Sun	10	11	10	28	25	0	9	18	9	37	19	7	2	7	2	28	4	59	5	20
31 Mo	10	47	11	6	22	11	9	59	10	21	18	1	2	48	3	11	5	41	6	3

The above are in Greenwich Mean Time, if local time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 2nd, 7h. 22m. a.m. | First Quarter. 17th, 2h. 15m. a.m.
 New Moon .. 10th, 3h. 52m. a.m. | Full Moon .. 24th, 1h. 39m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.	Even.	Height		Morn.	Even.	Height		Morn.	Even.	Height	
		H. M.	H. M.	F.	I.	H. M.	H. M.	F.	I.	H. M.	H. M.	F.	I.
1	Tuesday..	10 17	10 40	16	0	10 52	11 15	16	6	10 52	11 15	16	2
2	Wednesdy	11 3	11 31	15	1	11 38	..	15	7	11 38	..	15	4
3	Thursday.	..	0 2	14	9	0 6	0 37	15	3	0 6	0 37	15	1
4	Friday ..	0 34	1 6	15	2	1 9	1 41	15	8	1 9	1 41	15	5
5	Saturday..	1 39	2 11	16	1	2 14	2 46	16	7	2 14	2 46	16	3
6	Sunday ..	2 42	3 9	17	4	3 17	3 44	17	10	3 17	3 44	17	4
7	Monday..	3 33	3 58	18	6	4 8	4 33	19	0	4 8	4 33	18	5
8	Tuesday..	4 21	4 43	19	5	4 56	5 18	19	11	4 56	5 18	19	2
9	Wednesdy	5 6	5 28	20	2	5 41	6 3	20	8	5 41	6 3	20	6
10	Thursday.	5 49	6 9	20	6	6 24	6 44	21	0	6 24	6 44	20	3
11	Friday ..	6 29	6 51	20	10	7 4	7 26	21	4	7 4	7 26	20	7
12	Saturday..	7 11	7 31	20	9	7 46	8 6	21	3	7 46	8 6	20	6
13	Sunday ..	7 53	8 17	20	6	8 28	8 52	21	0	8 28	8 52	20	3
14	Monday..	8 41	9 3	19	11	9 16	9 38	20	5	9 16	9 38	19	9
15	Tuesday..	9 29	9 53	19	1	10 4	10 28	19	7	10 4	10 28	19	6
16	Wednesdy	10 18	10 43	18	2	10 53	11 18	18	8	10 53	11 18	18	2
17	Thursday.	11 10	11 38	17	5	11 45	..	17	11	11 45	..	17	5
18	Friday ..	..	0 11	17	1	0 13	0 46	17	7	0 13	0 46	17	2
19	Saturday..	0 45	1 22	17	6	1 20	1 57	18	0	1 20	1 57	17	6
20	Sunday ..	1 58	2 31	18	4	2 33	3 6	18	10	2 33	3 6	18	3
21	Monday..	3 4	3 33	19	3	3 39	4 9	19	9	3 39	4 9	19	2
22	Tuesday..	4 6	4 34	20	0	4 41	5 9	20	6	4 41	5 9	19	10
23	Wednesdy	5 2	5 29	20	4	5 37	6 4	20	10	5 37	6 4	20	2
24	Thursday.	5 53	6 13	20	7	6 28	6 48	21	1	6 28	6 48	20	4
25	Friday ..	6 34	6 55	20	7	7 9	7 30	21	1	7 9	7 30	20	4
26	Saturday..	7 15	7 33	20	2	7 50	8 8	20	8	7 50	8 8	20	0
27	Sunday ..	7 53	8 12	19	8	8 28	8 47	20	2	8 28	8 47	19	6
28	Monday..	8 30	8 49	18	11	9 5	9 24	19	5	9 5	9 24	18	10
29	Tuesday..	9 7	9 27	18	0	9 42	10 2	18	6	9 42	10 2	18	0
30	Wednesdy	9 45	10 5	17	3	10 20	10 40	17	9	10 20	10 40	17	2

The above are in Greenwich Mean Time, if local Time be required for
 Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter. 2nd, 7h. 22m. a.m. | First Quarter. 17th, 2h. 15m. a.m.
 New Moon .. 10th, 3h. 52m. a.m. | Full Moon .. 24th, 1h. 39m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.	Even.	Height		Morn.	Even.	Height		Morn.	Even.	Height	
		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.		H. M.	H. M.	F. I.	
1	Tuesday..	10 42	11 5	15 10		11 19	11 42	22 9		..	0 12	18 11	
2	Wednesdy	11 28	11 56	14 10		..	0 10	21 5		0 35	1 3	17 3	
3	Thursday.	..	0 27	14 5		0 41	1 14	21 0		1 34	2 7	16 9	
4	Friday ..	0 59	1 31	14 11		1 47	2 17	21 6		2 40	3 10	17 5	
5	Saturday..	2 4	2 36	16 0		2 47	3 19	22 10		3 40	4 12	19 1	
6	Sunday ..	3 7	3 34	17 4		3 51	4 21	24 6		4 44	5 14	21 2	
7	Monday..	3 58	4 23	18 8		4 47	5 13	26 3		5 40	6 6	23 4	
8	Tuesday..	4 46	5 8	19 9		5 37	5 59	27 6		6 30	6 52	24 11	
9	Wednesdy	5 31	5 53	20 8		6 22	6 44	28 9		7 15	7 37	26 5	
10	Thursday.	6 14	6 34	21 0		7 6	7 28	29 1		7 59	8 21	26 11	
11	Friday ..	6 54	7 16	21 5		7 47	8 9	29 8		8 40	9 2	27 7	
12	Saturday..	7 36	7 56	21 3		8 29	8 48	29 6		9 22	9 41	27 5	
13	Sunday ..	8 18	8 42	21 0		9 10	9 31	29 1		10 3	10 24	26 11	
14	Monday..	9 6	9 28	20 4		9 52	10 12	28 4		10 45	11 5	25 11	
15	Tuesday..	9 54	10 18	19 5		10 34	10 56	27 2		11 27	11 49	24 5	
16	Wednesdy	10 43	11 8	18 4		11 20	11 47	25 10		..	0 13	22 9	
17	Thursday.	11 35	..	17 5		..	0 17	24 8		0 40	1 10	21 4	
18	Friday ..	0 3	0 36	17 1		0 49	1 24	24 3		1 42	2 17	20 10	
19	Saturday.	1 10	1 47	17 6		1 57	2 32	24 10		2 50	3 25	21 6	
20	Sunday ..	2 23	2 56	18 6		3 6	3 40	26 0		3 59	4 33	23 0	
21	Monday..	3 29	3 59	19 7		4 14	4 48	27 5		5 7	5 41	24 9	
22	Tuesday..	4 31	4 59	20 5		5 21	5 51	28 6		6 14	6 44	26 1	
23	Wednesdy	5 27	5 54	20 10		6 19	6 45	29 0		7 12	7 38	26 9	
24	Thursday.	6 18	6 38	21 1		7 10	7 32	29 3		8 3	8 25	27 1	
25	Friday ..	6 59	7 20	21 1		7 52	8 13	29 3		8 45	9 6	27 1	
26	Saturday.	7 40	7 58	20 8		8 33	8 50	28 9		9 26	9 43	26 5	
27	Sunday ..	8 18	8 37	20 0		9 10	9 26	28 0		10 3	10 19	25 5	
28	Monday..	8 55	9 14	19 2		9 43	9 59	26 11		10 36	10 52	24 1	
29	Tuesday..	9 32	9 52	18 2		10 16	10 33	25 6		11 9	11 26	22 5	
30	Wednesdy	10 10	10 30	17 3		10 49	11 7	24 5		11 42	12 0	21 0	

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter.. 2nd, 0h. 46m. a.m. | Full Moon .. 23rd, 1h. 56m. p.m.
 New Moon .. 9th, 1h. 38m. p.m. | Last Quarter.. 31st, 5h. 6m. p.m.
 First Quarter.. 16th, 6h. 48m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.						Llanelly.						Milford Haven.					
		Morn.		Even.		Height.		Morn.		Even.		Height.		Morn.		Even.		Height.	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday..	10	25	10	46	16	3	11	0	11	21	16	9	11	0	11	21	16	3
2	Friday ..	11	9	11	34	15	6	11	44	..	16	0	11	44	..	15	8	..	6
3	Saturday..	..	0	4	15	3	0	0	9	0	39	15	9	0	9	0	39	15	6
4	Sunday ..	0	34	1	7	15	5	1	9	1	42	15	11	1	9	1	42	15	7
5	Monday..	1	40	2	13	16	2	2	15	2	48	16	8	2	15	2	48	16	4
6	Tuesday..	2	45	3	14	17	5	3	20	3	49	17	11	3	20	3	49	17	3
7	Wednesdy	3	40	4	9	18	9	4	15	4	44	19	3	4	15	4	44	18	8
8	Thursday..	4	36	5	2	19	10	5	11	5	37	20	4	5	11	5	37	19	1
9	Friday ..	5	27	5	51	20	3	6	2	6	26	20	9	6	2	6	26	20	1
10	Saturday..	6	14	6	37	21	0	6	49	7	12	21	6	6	49	7	12	20	9
11	Sunday ..	6	59	7	21	21	6	7	34	7	56	22	0	7	34	7	56	21	2
12	Monday..	7	43	8	9	21	6	8	18	8	44	22	0	8	18	8	44	21	2
13	Tuesday..	8	32	8	56	21	0	9	7	9	31	21	6	9	7	9	31	20	9
14	Wednesdy	9	18	9	42	20	3	9	53	10	17	20	9	9	53	10	17	20	1
15	Thursday..	10	6	10	30	19	3	10	41	11	5	19	9	10	41	11	5	19	3
16	Friday ..	10	52	11	17	18	1	11	27	11	52	18	7	11	27	11	52	18	1
17	Saturday..	11	43	..	17	0	0	..	0	18	17	6	..	..	0	18	17	1	1
18	Sunday ..	0	15	0	50	16	8	0	50	1	25	17	2	0	50	1	25	16	9
19	Monday..	1	29	2	7	16	11	2	4	2	42	17	5	2	4	2	42	17	6
20	Tuesday..	2	45	3	21	17	9	3	20	3	56	18	3	3	20	3	56	17	9
21	Wednesdy	3	53	4	21	18	8	4	28	4	56	19	2	4	28	4	56	18	7
22	Thursday..	4	49	5	15	19	5	5	24	5	50	19	11	5	24	5	50	19	3
23	Friday ..	5	39	6	0	19	9	6	14	6	35	20	3	6	14	6	35	19	7
24	Saturday..	6	19	6	38	20	1	6	54	7	13	20	7	6	54	7	13	19	11
25	Sunday ..	6	57	7	13	20	2	7	32	7	48	20	8	7	32	7	48	20	9
26	Monday..	7	31	7	49	19	11	8	6	8	24	20	5	8	6	8	24	19	9
27	Tuesday..	8	8	8	25	19	7	8	43	9	0	20	1	8	43	9	0	19	3
28	Wednesdy	8	41	8	57	19	0	9	16	9	32	19	6	9	16	9	32	18	11
29	Thursday..	9	15	9	31	18	2	9	50	10	6	18	8	9	50	10	6	18	2
30	Friday ..	9	48	10	7	17	5	10	23	10	42	17	11	10	23	10	42	17	5
31	Saturday..	10	25	10	45	16	4	11	0	11	20	16	10	11	0	11	20	16	6

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Last Quarter . 2nd, 0h. 46m. a.m. Full Moon .. 23rd, 1h. 55m. p.m.
 New Moon .. 9th, 1h. 38m. p.m. Last Quarter . 31st, 6h. 6m. p.m.
 First Quarter. 16th, 6h. 48m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Thursday.	10 50	11 11	16 2	11 27	11 50	23 2	..	0 20	19 5			
2	Friday ..	11 34	11 59	15 3	..	0 16	22 0	0 43	1 9	18 0			
3	Saturday..	..	0 29	15 0	0 44	1 16	21 8	1 37	2 9	17 7			
4	Sunday ..	0 59	1 32	15 2	1 47	2 18	21 10	2 40	3 11	17 9			
5	Monday ..	2 5	2 38	16 1	2 48	3 20	23 0	3 41	4 13	19 3			
6	Tuesday..	3 10	3 39	17 5	3 53	4 26	24 8	4 46	5 19	21 4			
7	Wednesday	4 5	4 34	19 0	4 54	5 24	26 7	5 47	6 17	23 9			
8	Thursday.	5 1	5 27	20 3	5 52	6 19	28 3	6 45	7 12	25 9			
9	Friday ..	5 52	6 16	20 9	6 43	7 8	28 11	7 36	8 1	26 7			
10	Saturday..	6 39	7 2	21 7	7 33	7 55	29 11	8 26	8 48	27 11			
11	Sunday ..	7 24	7 46	22 1	8 17	8 39	30 7	9 10	9 32	28 9			
12	Monday...	8 8	8 34	22 1	9 0	9 24	30 7	9 53	10 17	28 9			
13	Tuesday..	8 57	9 21	21 7	9 45	10 6	29 11	10 38	10 59	27 11			
14	Wednesday	9 43	10 7	20 9	10 25	10 46	28 11	11 18	11 39	26 7			
15	Thursday.	10 31	10 55	19 7	11 8	11 31	27 5	..	0 1	24 9			
16	Friday ..	11 17	11 42	18 3	11 57	..	25 8	0 24	0 50	22 7			
17	Saturday..	..	0 8	17 0	0 25	0 54	24 2	1 18	1 47	20 8			
18	Sunday ..	0 40	1 15	16 7	1 28	2 2	23 8	2 21	2 55	20 1			
19	Monday..	1 54	2 32	16 11	2 38	3 14	24 0	3 31	4 7	20 6			
20	Tuesday..	3 10	3 46	17 10	3 53	4 33	25 2	4 46	5 26	21 11			
21	Wednesday	4 18	4 46	18 11	5 8	5 37	26 6	6 1	6 30	23 7			
22	Thursday.	5 14	5 40	19 9	6 5	6 31	27 6	6 58	7 24	24 11			
23	Friday ..	6 4	6 25	20 2	6 55	7 18	28 1	7 48	8 11	25 7			
24	Saturday..	6 44	7 3	20 7	7 38	7 56	28 7	8 31	8 49	26 3			
25	Sunday ..	7 22	7 38	20 8	8 15	8 31	28 9	9 8	9 24	26 5			
26	Monday..	7 56	8 14	20 4	8 48	9 6	28 4	9 41	9 59	25 11			
27	Tuesday..	8 33	8 50	19 11	9 23	9 38	27 10	10 16	10 31	25 3			
28	Wednesday	9 6	9 22	19 4	9 52	10 7	27 0	10 45	11 0	24 3			
29	Thursday.	9 40	9 56	18 4	10 23	10 37	25 10	11 16	11 30	22 9			
30	Friday ..	10 13	10 32	17 5	10 51	11 9	24 8	11 45	..	21 4			
31	Saturday..	10 50	11 10	16 3	11 27	11 49	23 3	0 2	0 20	19 7			

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 40m.
 For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 7th, 10h. 8m. p.m. | Full Moon .. 22nd, 4h. 24m. a.m.
 First Quarter. 14th, 0h. 41m. p.m. | Last Quarter. 30th, 7h. 53m. a.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even		Height		Morn.		Even		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Sunday ..	10	58	11	25	22	1	0	17	0	42	8	8
2	Monday..	11	58	..	..	21	10	1	13	1	49	8	4
3	Tuesday..	0	33	1	11	22	0	2	23	2	59	8	6
4	Wednesday	1	49	2	27	23	0	3	35	4	13	9	9
5	Thursday.	3	0	3	32	24	6	4	50	5	25	11	8
6	Friday ..	4	3	4	34	26	1	5	57	6	28	13	8
7	Saturday..	5	2	5	25	27	5	6	56	7	20	15	3
8	Sunday ..	5	49	6	11	27	11	7	45	8	8	15	11
9	Monday..	6	35	6	56	28	7	8	31	8	52	16	9
10	Tuesday..	7	19	7	43	28	9	9	15	9	38	17	0
11	Wednesday	8	5	8	28	28	5	9	57	10	18	16	7
12	Thursday.	8	52	9	12	27	7	10	39	10	57	15	6
13	Friday ..	9	33	9	54	26	4	11	14	11	34	13	11
14	Saturday..	10	17	10	40	24	10	11	57	..	12	1	1
15	Sunday ..	11	7	11	37	23	4	0	23	0	53	10	2
16	Monday..	..	..	0	12	22	4	1	26	2	4	8	11
17	Tuesday..	0	56	1	39	22	4	2	45	3	25	8	11
18	Wednesday	2	19	2	56	23	2	4	5	4	45	10	0
19	Thursday.	3	29	4	0	24	3	5	21	5	53	11	4
20	Friday ..	4	27	4	50	25	3	6	21	6	44	12	7
21	Saturday .	5	12	5	34	25	8	7	7	7	28	13	1
22	Sunday ..	5	52	6	7	26	3	7	48	8	4	13	10
23	Monday..	6	25	6	42	26	8	8	21	8	38	14	4
24	Tuesday..	6	57	7	13	26	10	8	53	9	9	14	7
25	Wednesday	7	29	7	45	26	7	9	24	9	38	14	3
26	Thursday.	7	59	8	15	26	2	9	52	10	6	13	9
27	Friday ..	8	31	8	46	25	6	10	20	10	34	12	11
28	Saturday .	9	2	9	19	24	7	10	48	11	3	11	9
29	Sunday ..	9	37	9	57	23	7	11	18	11	37	10	6
30	Monday..	10	19	10	43	22	6	11	58	..	9	2	11
31	Tuesday..	11	13	11	46	21	7	0	27	0	59	7	11

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 7th, 10h. 8m. p.m. | Full Moon .. 22nd, 4h. 24m. a.m.
 First Quarter. 14th, 0h. 41m. p.m. | Last Quarter . 30th, 7h. 58m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.						Cardiff.						Gloucester.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Sunday ..	11	33	12	0	15	2	..	0	15	21	10	0	42	1	8	17	9	
2	Monday..	..		0	33	14	10	0	45	1	21	21	5	1	38	2	14	17	3
3	Tuesday..	1	8	1	46	15	0	1	55	2	31	21	8	2	48	3	24	17	7
4	Wednesday	2	24	3	2	16	3	3	7	3	45	23	3	4	0	4	38	19	7
5	Thursday.	3	35	4	7	18	2	4	22	4	57	25	6	5	15	5	50	22	5
6	Friday ..	4	38	5	9	20	2	5	29	6	0	28	1	6	22	6	53	25	7
7	Saturday..	5	37	6	0	21	10	6	28	6	52	30	2	7	21	7	45	28	3
8	Sunday ..	6	24	6	46	22	5	7	17	7	40	31	0	8	10	8	33	29	3
9	Monday..	7	10	7	31	23	3	8	3	8	24	31	11	8	56	9	17	30	5
10	Tuesday..	7	54	8	18	23	6	8	47	9	10	32	2	9	40	10	3	30	9
11	Wednesday	8	40	9	3	23	1	9	29	9	50	31	8	10	22	10	43	30	1
12	Thursday.	9	27	9	47	22	0	10	11	10	29	30	6	11	4	11	22	28	7
13	Friday ..	10	8	10	29	20	5	10	46	11	6	28	6	11	39	11	59	26	1
14	Saturday..	10	52	11	15	18	7	11	29	11	55	26	1	..	0	22	23	1	
15	Sunday ..	11	42	..		16	8	..	0	25	23	9	0	48	1	18	20	3	
16	Monday..	0	12	0	47	15	5	0	58	1	36	22	3	1	51	2	29	18	4
17	Tuesday..	1	31	2	14	15	5	2	17	2	57	22	3	3	10	3	50	18	4
18	Wednesday	2	54	3	31	16	6	3	37	4	17	23	6	4	30	5	10	19	11
19	Thursday.	4	4	4	36	17	10	4	53	5	25	25	2	5	46	6	18	21	11
20	Friday ..	5	2	5	25	19	1	5	53	6	16	26	9	6	46	7	9	23	11
21	Saturday.	5	47	6	9	19	7	6	39	7	0	27	5	7	32	7	53	24	9
22	Sunday ..	6	27	6	42	20	4	7	20	7	36	28	4	8	13	8	29	25	11
23	Monday..	7	0	7	17	20	10	7	53	8	10	29	0	8	46	9	3	26	9
24	Tuesday..	7	32	7	48	21	1	8	25	8	41	29	3	9	18	9	34	27	1
25	Wednesday	8	4	8	20	20	9	8	56	9	10	28	11	9	49	10	3	26	7
26	Thursday.	8	34	8	50	20	3	9	24	9	38	28	3	10	17	10	31	25	9
27	Friday ..	9	6	9	21	19	5	9	52	10	6	27	2	10	45	10	59	24	5
28	Saturday.	9	37	9	54	18	3	10	20	10	35	25	8	11	13	11	28	22	7
29	Sunday ..	10	12	10	32	17	0	10	50	11	9	24	2	11	43	..		20	8
30	Monday..	10	54	11	18	15	8	11	30	11	59	22	6	0	2	0	23	18	7
31	Tuesday..	11	48	..		14	5	..	0	31	21	0	0	53	1	24	16	9	

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 7th, 10h. 8m. p.m. | Full Moon .. 22nd, 4h. 24m. a.m.
 First Quarter. 14th, 0h. 41m. p.m. | Last Quarter. 30th, 7h. 58m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.					Llanelly.					Milford Haven.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Sunday ..	11	8	11	35	15	5	11	43	..	15	11	11	43	..	15	7	..	7
2	Monday ..	..	0	0	8	15	1	0	10	0	43	15	7	0	10	0	43	15	4
3	Tuesday ..	0	43	1	21	15	3	1	18	1	56	15	9	1	18	1	56	15	6
4	Wednesday ..	1	59	2	37	16	4	2	34	3	12	16	10	2	34	3	12	16	6
5	Thursday ..	3	10	3	42	18	0	3	45	4	17	18	6	3	45	4	17	18	0
6	Friday ..	4	13	4	44	19	9	4	48	5	19	20	3	4	48	5	19	19	7
7	Saturday ..	5	12	5	35	21	3	5	47	6	10	21	9	5	47	6	10	20	11
8	Sunday ..	5	59	6	21	21	9	6	34	6	56	22	3	6	34	6	56	21	5
9	Monday ..	6	45	7	6	22	6	7	20	7	41	23	0	7	20	7	41	22	1
10	Tuesday ..	7	29	7	53	22	8	8	4	8	28	23	2	8	4	8	28	22	3
11	Wednesday ..	8	15	8	38	22	4	8	50	9	13	22	10	8	50	9	13	21	11
12	Thursday ..	9	2	9	22	21	5	9	37	9	57	21	11	9	37	9	57	21	1
13	Friday ..	9	43	10	4	20	0	10	18	10	39	20	6	10	18	10	39	19	10
14	Saturday ..	10	27	10	50	18	5	11	2	11	25	18	11	11	2	11	25	18	4
15	Sunday ..	11	17	11	47	16	9	11	52	..	17	3	11	52	..	16	10	..	10
16	Monday ..	..	0	0	22	15	8	0	22	0	57	16	2	0	22	0	57	15	10
17	Tuesday ..	1	6	1	49	15	8	1	41	2	24	16	2	1	41	2	24	15	10
18	Wednesday ..	2	29	3	6	16	7	3	4	3	41	17	1	3	4	3	41	16	8
19	Thursday ..	3	39	4	10	17	9	4	14	4	45	18	3	4	14	4	45	17	9
20	Friday ..	4	37	5	0	18	10	5	12	5	35	19	4	5	12	5	35	18	9
21	Saturday ..	5	22	5	44	19	3	5	57	6	19	19	9	5	57	6	19	19	2
22	Sunday ..	6	2	6	17	19	11	6	37	6	52	20	5	6	37	6	52	19	9
23	Monday ..	6	35	6	52	20	4	7	10	7	27	20	10	7	10	7	27	20	2
24	Tuesday ..	7	7	7	23	20	7	7	42	7	58	21	1	7	42	7	58	20	4
25	Wednesday ..	7	39	7	55	20	3	8	14	8	30	20	9	8	14	8	30	20	1
26	Thursday ..	8	9	8	25	19	10	8	44	9	0	20	4	8	44	9	0	19	8
27	Friday ..	8	41	8	56	19	1	9	16	9	31	19	7	9	16	9	31	19	0
28	Saturday ..	9	12	9	29	18	1	9	47	10	4	18	7	9	47	10	4	18	1
29	Sunday ..	9	47	10	7	17	0	10	22	10	42	17	6	10	22	10	42	17	1
30	Monday ..	10	29	10	53	15	10	11	4	11	28	16	4	11	4	11	28	16	0
31	Tuesday ..	11	23	11	56	14	9	11	58	..	15	3	11	58	..	15	1	..	1

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 7th, 10h. 8m. p.m. | Full Moon .. 22nd, 4h. 24m. a.m.
 First Quarter. 14th, 0h. 41m. p.m. | Last Quarter . 30th, 7h. 58m. a.m.

M. W. D. D.	Newport.					Swansea.					Liverpool.				London.			
	Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.	
	H. M.	H. M.	F. I.	F. I.		H. M.	H. M.	F. I.	F. I.		H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1 Sun	..	0 22	20	1	11 33	12 0	16	2	4 35	5 5	7 27	7 52						
2 Mo	0 53	1 29	19	7	..	0 33	15	10	5 39	6 19	8 21	8 56						
3 Tu	2 3	2 39	19	11	1 8	1 46	16	0	6 56	7 32	9 32	10 6						
4 Wd	3 15	3 53	21	10	2 24	3 2	17	3	8 4	8 37	10 41	11 16						
5 Th	4 30	5 5	24	4	3 35	4 7	19	2	9 6	9 34	11 50	..						
6 Fri	5 37	6 8	27	4	4 38	5 9	21	2	9 59	10 25	0 20	0 48						
7 Sat	6 36	7 0	29	9	5 37	6 0	22	10	10 49	11 11	1 15	1 42						
8 Sun	7 25	7 48	30	8	6 24	6 46	23	5	11 34	11 57	2 6	2 27						
9 Mo	8 11	8 32	31	8	7 10	7 31	24	3	..	0 21	2 50	3 12						
10 Tu	8 55	9 18	32	0	7 54	8 18	24	6	0 42	1 6	3 35	3 55						
11 Wd	9 37	9 58	31	5	8 40	9 3	24	1	1 30	1 51	4 18	4 42						
12 Th	10 19	10 37	30	1	9 27	9 47	23	0	2 13	2 37	5 3	5 26						
13 Fri	10 54	11 14	27	10	10 8	10 29	21	5	2 59	3 21	5 51	6 14						
14 Sat	11 37	..	25	0	10 52	11 15	19	7	3 45	4 12	6 37	7 2						
15 Sun	0 3	0 33	22	5	11 42	..	17	8	4 42	5 17	7 29	7 59						
16 Mo	1 6	1 44	20	7	0 12	0 47	16	5	5 54	6 36	8 33	9 10						
17 Tu	2 25	3 5	20	7	1 31	2 14	16	5	7 18	7 55	9 47	10 27						
18 Wd	3 45	4 25	22	1	2 54	3 31	17	6	8 30	9 3	11 6	11 43						
19 Th	5 1	5 33	23	11	4 4	4 35	18	10	9 31	9 56	..	0 16						
20 Fri	6 1	6 24	25	10	5 2	5 25	20	1	10 19	10 38	0 45	1 12						
21 Sat	6 47	7 8	26	7	5 47	6 9	20	7	10 59	11 19	1 36	1 56						
22 Sun	7 28	7 44	27	8	6 27	6 42	21	4	11 38	11 53	2 15	2 35						
23 Mo	8 1	8 18	28	4	7 0	7 17	21	10	..	0 11	2 53	3 8						
24 Tu	8 33	8 49	28	7	7 32	7 48	22	1	0 28	0 43	3 25	3 41						
25 Wd	9 4	9 18	28	8	8 4	8 20	21	9	1 0	1 16	3 56	4 12						
26 Th	9 32	9 46	27	6	8 34	8 50	21	3	1 31	1 45	4 28	4 43						
27 Fri	10 0	10 14	26	3	9 6	9 21	20	5	2 0	2 16	4 57	5 13						
28 Sat	10 28	10 43	24	6	9 37	9 54	19	3	2 32	2 48	5 29	5 45						
29 Sun	10 58	11 17	22	10	10 12	10 32	18	0	3 6	3 26	6 3	6 22						
30 Mo	11 38	..	20	11	10 54	11 18	16	8	3 48	4 14	6 42	7 5						
31 Tu	0 7	0 39	19	2	11 48	..	15	5	4 47	5 24	7 31	8 3						

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 6th, 6h. 7m. a.m. | Full Moon .. 20th, 8h. 41m. p.m.
 First Quarter. 12th, 9h. 23m. p.m. | Last Quarter. 28th, 9h. 10m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	..	0	28	21	8		1	36	2	18	8	0
2	Thursday	1	11	1	54	22	7	2	59	3	39	9	3
3	Friday ..	2	32	3	7	24	5	4	19	4	57	11	7
4	Saturday..	3	41	4	9	26	4	5	34	6	3	13	11
5	Sunday ..	4	36	5	2	27	11	6	30	6	56	15	11
6	Monday..	5	29	5	52	28	6	7	23	7	48	16	8
7	Tuesday..	6	13	6	38	29	5	8	10	8	34	17	10
8	Wednesday	7	0	7	22	29	7	8	56	9	17	18	0
9	Thursday	7	43	8	5	29	1	9	38	9	57	17	5
10	Friday ..	8	26	8	47	28	0	10	16	10	35	16	0
11	Saturday..	9	8	9	28	26	5	10	53	11	11	14	1
12	Sunday ..	9	51	10	15	24	7	11	31	11	55	11	9
13	Monday..	10	41	11	12	22	10	..	0	24	9	7	
14	Tuesday..	11	47	..	21	8		0	58	1	37	8	0
15	Wednesday	0	30	1	18	21	7	2	21	3	5	7	11
16	Thursday	2	1	2	39	22	6	3	47	4	26	9	2
17	Friday ..	3	12	3	39	23	9	5	2	5	32	10	9
18	Saturday..	4	4	4	28	24	11	5	58	6	22	12	2
19	Sunday ..	4	49	5	7	25	11	6	43	7	2	13	5
20	Monday..	5	25	5	42	26	4	7	20	7	37	13	11
21	Tuesday..	5	56	6	11	26	11	7	52	8	8	14	8
22	Wednesday	6	28	6	43	27	2	8	24	8	39	15	0
23	Thursday	6	59	7	14	27	0	8	55	9	10	14	9
24	Friday ..	7	27	7	42	26	7	9	22	9	37	14	3
25	Saturday..	8	0	8	16	26	0	9	53	10	7	13	6
26	Sunday ..	8	32	8	49	25	1	10	21	10	36	12	5
27	Monday..	9	8	9	29	23	11	10	53	11	11	10	11
28	Tuesday..	9	51	10	16	22	9	11	31	11	56	9	6
29	Wednesday	10	44	11	17	21	8	..	0	27	8	0	
30	Thursday	11	58	..	21	8		1	4	1	49	8	0

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m — Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 6th, 6h. 7m. a.m. | Full Moon .. 20th, 8h. 41m. p.m.
 First Quarter. 12th, 9h. 23m. p.m. | Last Quarter. 28th, 9h. 10m. p.m.

WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
	Morn.		Even.		Height		Morn.		Even.		Height	
	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1 Wednesday	0 21	1 3	14 6	1 8	1 50	21 1	2 1	2 43	16 11			
2 Thursday	1 46	2 29	15 9	2 31	3 11	22 7	3 24	4 4	18 9			
3 Friday ..	3 7	3 42	18 1	3 51	4 29	25 5	4 44	5 22	22 3			
4 Saturday..	4 16	4 44	20 5	5 6	5 35	28 6	5 59	6 28	26 1			
5 Sunday ..	5 11	5 37	22 5	6 2	6 28	31 0	6 55	7 21	29 3			
6 Monday ..	6 4	6 27	23 2	6 55	7 20	31 9	7 48	8 13	30 3			
7 Tuesday ..	6 48	7 13	24 4	7 42	8 6	33 3	8 35	8 59	32 1			
8 Wednesday	7 35	7 57	24 6	8 28	8 49	33 6	9 21	9 42	32 4			
9 Thursday	8 18	8 40	23 11	9 10	9 29	32 9	10 3	10 22	31 5			
0 Friday ..	9 1	9 22	22 6	9 48	10 7	31 1	10 41	11 0	29 5			
1 Saturday..	9 43	10 3	20 7	10 25	10 43	28 7	11 18	11 36	26 3			
2 Sunday ..	10 26	10 50	18 3	11 3	11 27	25 8	11 56	..	22 7			
3 Monday...	11 16	11 47	16 1	11 56	..	23 0	0 20	0 49	19 3			
4 Tuesday ..	..	0 22	14 6	0 30	1 9	21 1	1 23	2 2	16 11			
5 Wednesday	1 5	1 53	14 5	1 53	2 37	21 0	2 46	3 30	16 9			
16 Thursday	2 36	3 14	15 8	3 19	3 58	22 6	4 12	4 51	18 7			
17 Friday ..	3 47	4 14	17 3	4 31	5 4	24 5	5 27	5 57	21 0			
18 Saturday..	4 39	5 3	18 8	5 30	5 54	26 3	6 23	6 47	23 4			
19 Sunday ..	5 24	5 42	19 11	6 15	6 34	27 10	7 8	7 27	25 3			
20 Monday ..	6 0	6 17	20 5	6 52	7 9	28 6	7 45	8 2	26 1			
21 Tuesday ..	6 31	6 46	21 2	7 24	7 40	29 5	8 17	8 33	27 3			
22 Wednesday	7 3	7 18	21 6	7 56	8 11	29 9	8 49	9 4	27 9			
23 Thursday	7 34	7 49	21 3	8 27	8 42	29 6	9 20	9 35	27 5			
24 Friday ..	8 2	8 17	20 9	8 54	9 9	28 11	9 47	10 2	26 7			
25 Saturday..	8 35	8 51	20 0	9 25	9 39	28 0	10 18	10 32	25 5			
26 Sunday ..	9 7	9 24	18 11	9 53	10 8	26 6	10 46	11 1	23 7			
27 Monday ..	9 43	10 4	17 5	10 25	10 43	24 8	11 18	11 36	21 4			
28 Tuesday ..	10 26	10 51	16 0	11 3	11 28	22 10	11 56	..	19 1			
29 Wednesday	11 19	11 52	14 6	11 59	..	21 1	0 21	0 52	16 11			
30 Thursday	..	0 33	14 6	0 36	1 21	21 1	1 29	2 14	16 11			

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.
 For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 6th, 6h. 7m. a.m. | Full Moon .. 20th, 8h. 41m. p.m.
 First Quarter . 12th, 9h. 23m. p.m. | Last Quarter . 28th, 9h. 10m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	..	0	38	14	10		0	31	1	13	15	4
2	Thursday	1	21	2	4	15	11	1	56	2	39	16	5
3	Friday ..	2	42	3	17	17	11	3	17	3	52	18	5
4	Saturday..	3	51	4	19	20	0	4	26	4	54	20	6
5	Sunday ..	4	46	5	12	21	9	5	21	5	47	22	3
6	Monday..	5	39	6	2	22	5	6	14	6	37	22	11
7	Tuesday..	6	23	6	48	23	5	6	58	7	23	23	11
8	Wednesday	7	10	7	32	23	7	7	45	8	7	24	1
9	Thursday	7	53	8	15	23	0	8	28	8	50	23	6
10	Friday ..	8	36	8	57	21	10	9	11	9	32	22	4
11	Saturday..	9	18	9	38	20	1	9	53	10	13	20	7
12	Sunday ..	10	1	10	25	18	1	10	36	11	0	18	7
13	Monday..	10	51	11	22	16	2	11	26	11	57	16	8
14	Tuesday..	11	57	..	14	10		..	0	32	15	4	
15	Wednesday	0	40	1	28	14	9	1	15	2	3	15	3
16	Thursday	2	11	2	49	15	10	2	46	3	24	16	4
17	Friday ..	3	22	3	49	17	3	3	57	4	24	17	9
18	Saturday..	4	14	4	38	18	6	4	49	5	13	18	0
19	Sunday ..	4	59	5	17	19	7	5	34	5	52	19	1
20	Monday..	5	35	5	52	20	0	6	10	6	27	20	6
21	Tuesday..	6	6	6	21	20	8	6	41	6	56	21	2
22	Wednesday	6	38	6	53	20	11	7	13	7	28	21	5
23	Thursday	7	9	7	24	20	9	7	44	7	59	21	3
24	Friday ..	7	37	7	52	20	3	8	12	8	27	20	9
25	Saturday..	8	10	8	26	19	8	8	45	9	1	19	2
26	Sunday ..	8	42	9	0	18	8	9	17	9	34	19	2
27	Monday..	9	18	9	39	17	5	9	53	10	14	17	11
28	Tuesday..	10	11	10	26	16	1	10	36	11	1	16	7
29	Wednesday	10	54	11	27	14	10	11	29	..	15	4	
30	Thursday	..	0	8	14	10		0	2	0	43	15	4

The above are in Greenwich Mean Time, if local Time be required for
 Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.
 For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 6th, 6h. 7m. a.m. | Full Moon .. 20th, 8h. 41m. p.m.
 First Quarter. 12th, 9h. 23m. p.m. | Last Quarter. 28th, 9h. 10m. p.m.

M. D.	W. D.	Newport.					Swansea.					Liverpool.				London.			
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.	
		H. M.	M. F.	H. M.	M. F.	I.	H. M.	M. F.	H. M.	M. F.	I.	H. M.	M. F.	H. M.	M. F.	H. M.	M. F.	H. M.	M. F.
1	Wd	1 16	1 58	19	3		0 21	1 3	15	6		6 5	6 51			8 40	9 20		
2	Th	2 39	3 19	21	0		1 46	2 29	16	9		7 32	8 8			10 1	10 41		
3	Fri	3 59	4 37	24	2		3 7	3 42	19	1		8 42	9 12			11 20	11 55		
4	Sat	5 14	5 43	27	10		4 16	4 44	21	5		9 40	10 4			..	0 26		
5	Sun	6 10	6 36	30	8		5 11	5 37	23	5		10 26	10 49			0 55	1 20		
6	Mo	7 3	7 28	31	6		6 4	6 27	24	2		11 14	11 38			1 44	2 6		
7	Tu	7 50	8 14	33	4		6 48	7 13	25	4		11 59	..			2 30	2 53		
8	Wd	8 36	8 57	33	7		7 35	7 57	25	6		0 24	0 46			3 14	3 37		
9	Th	9 18	9 37	32	8		8 18	8 40	24	11		1 9	1 30			3 59	4 21		
10	Fri	9 56	10 15	30	9		9 1	9 22	23	6		1 51	2 11			4 42	5 3		
11	Sat	10 33	10 51	27	11		9 43	10 3	21	7		2 33	2 54			5 24	5 46		
12	Sun	11 11	11 35	24	6		10 26	10 50	19	3		3 16	3 41			6 9	6 32		
13	Mo	..	0 4	21	6		11 16	11 47	17	1		4 10	4 43			6 58	7 27		
14	Tu	0 38	1 17	19	3		..	0 22	15	6		5 23	6 6			8 0	8 39		
15	Wd	2 1	2 45	19	2		1 5	1 53	15	5		6 54	7 37			9 21	10 4		
16	Th	3 27	4 6	20	11		2 36	3 14	16	8		8 15	8 48			10 47	11 27		
17	Fri	4 42	5 12	23	1		3 47	4 14	18	3		9 16	9 39			..	0 1		
18	Sat	5 38	6 2	25	2		4 39	5 3	19	8		10 0	10 20			0 30	0 54		
19	Sun	6 23	6 42	27	1		5 24	5 42	20	11		10 37	10 54			1 16	1 37		
20	Mo	7 0	7 17	27	10		6 0	6 17	21	5		11 11	11 27			1 55	2 11		
21	Tu	7 32	7 48	28	9		6 31	6 46	22	2		11 42	11 57			2 27	2 43		
22	Wd	8 4	8 19	29	3		7 3	7 18	22	6		..	0 14			2 57	3 12		
23	Th	8 35	8 50	28	11		7 34	7 49	22	3		0 29	0 45			3 28	3 42		
24	Fri	9 2	9 17	28	3		8 2	8 17	21	9		1 1	1 14			3 58	4 13		
25	Sat	9 33	9 47	27	3		8 35	8 51	21	0		1 29	1 46			4 26	4 41		
26	Sun	10 1	10 16	25	6		9 7	9 24	19	11		2 1	2 17			4 58	5 14		
27	Mo	10 33	10 51	23	4		9 43	10 4	18	5		2 34	2 54			5 30	5 48		
28	Tu	11 11	11 36	21	4		10 26	10 51	17	0		3 17	3 41			6 9	6 33		
29	Wd	..	0 7	19	3		11 19	11 52	15	6		4 11	4 48			6 58	7 28		
30	Th	0 44	1 29	19	3		..	0 53	15	6		5 29	6 19			8 4	8 46		

The above are in Greenwich Mean Time, if local time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.
 For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 5th, 2h. 20m. p.m. | Full Moon .. 20th, 1h. 57m. p.m.
 First Quarter. 12th, 10h. 3m. a.m. | Last Quarter. 28th, 8h. 34m. a.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even		Height		Morn.		Even		Height	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Friday ..	0 44	1 30	22 7	2 34	3 16	9 3	2 14	2 56	30 7			
2	Saturday..	2 11	2 46	24 6	3 57	4 34	11 8	3 37	4 14	24 0			
3	Sunday ..	3 16	3 45	26 8	5 7	5 38	14 4	4 47	5 18	28 1			
4	Monday..	4 11	4 39	28 4	6 5	6 33	16 5	5 45	6 13	31 6			
5	Tuesday..	5 3	5 27	29 5	6 57	7 22	17 10	6 37	7 2	33 8			
6	Wednesday	5 50	6 13	29 8	7 46	8 10	18 1	7 26	7 50	33 2			
7	Thursday.	6 35	6 57	29 8	8 31	8 53	18 1	8 11	8 33	33 2			
8	Friday ..	7 18	7 40	29 0	9 14	9 35	17 3	8 54	9 15	32 4			
9	Saturday..	8 2	8 23	27 10	9 54	10 13	15 10	9 34	9 53	30 2			
10	Sunday ..	8 44	9 4	26 2	10 32	10 50	13 9	10 12	10 30	27 2			
11	Monday..	9 28	9 53	24 4	11 11	11 33	11 5	10 51	11 13	23 9			
12	Tuesday..	10 19	10 47	22 7	11 58	..	9 3	11 38	..	20 7			
13	Wednesday	11 21	..	21 6	0 31	1 9	7 10	0 11	0 49	18 7			
14	Thursday.	0 2	0 48	21 4	1 53	2 38	7 7	1 33	2 18	18 4			
15	Friday ..	1 31	2 9	22 2	3 17	3 55	8 9	2 57	3 35	19 11			
16	Saturday .	2 41	3 8	23 5	4 29	4 59	10 4	4 9	4 39	22 2			
17	Sunday ..	3 32	3 55	24 8	5 25	5 48	11 10	5 5	5 28	24 4			
18	Monday..	4 14	4 34	25 8	6 8	6 28	13 1	5 48	6 8	26 2			
19	Tuesday..	4 51	5 9	26 4	6 45	7 3	13 11	6 25	6 43	27 6			
20	Wednesday	5 26	5 42	26 8	7 21	7 37	14 4	7 1	7 17	28 1			
21	Thursday.	5 57	6 13	27 0	7 54	8 10	14 9	7 34	7 50	28 8			
22	Friday ..	6 29	6 44	27 0	8 25	8 40	14 9	8 5	8 20	28 8			
23	Saturday .	7 0	7 16	26 8	8 56	9 12	14 4	8 36	8 52	28 1			
24	Sunday ..	7 31	7 49	26 0	9 26	9 42	13 6	9 6	9 22	26 10			
25	Monday..	8 7	8 26	25 3	9 59	10 16	12 7	9 39	9 56	25 6			
26	Tuesday..	8 47	9 9	24 3	10 35	10 54	11 4	10 15	10 34	23 7			
27	Wednesday	9 32	9 58	23 3	11 14	11 38	10 1	10 54	11 18	21 10			
28	Thursday.	10 28	11 0	22 3	..	0 8	8 10	11 48	..	20 0			
29	Friday ..	11 35	..	22 2	0 45	1 24	8 9	0 25	1 4	19 11			
30	Saturday .	0 17	1 3	23 1	2 9	2 51	9 11	1 49	2 31	21 7			
31	Sunday ..	1 44	2 19	24 9	3 30	4 5	12 0	3 10	3 45	24 6			

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 5th, 2h. 20m. p.m. | Full Moon .. 20th, 1h. 57m. p.m.
 First Quarter. 12th, 10h. 3m. a.m. | Last Quarter .. 28th, 8h. 34m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.						Cardiff.						Gloucester.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	1	19	2	5	15	9	2	6	2	48	22	7	2	59	3	41	18	9
2	Saturday..	2	46	3	21	18	2	3	29	4	6	25	6	4	22	4	59	22	5
3	Sunday ..	3	51	4	20	20	10	4	39	5	10	29	0	5	32	6	3	26	9
4	Monday..	4	46	5	14	22	11	5	37	6	5	31	6	6	30	6	58	29	11
5	Tuesday..	5	38	6	2	24	4	6	29	6	54	33	3	7	22	7	47	32	1
6	Wednesday	6	25	6	48	24	7	7	18	7	42	33	7	8	11	8	35	32	6
7	Thursday.	7	10	7	32	24	7	8	3	8	25	33	7	8	56	9	18	32	6
8	Friday ..	7	53	8	15	23	9	8	46	9	7	32	7	9	39	10	0	31	3
9	Saturday.	8	37	8	58	22	4	9	26	9	45	30	10	10	19	10	38	29	1
10	Sunday ..	9	19	9	39	20	3	10	4	10	22	28	3	10	57	11	15	25	9
11	Monday..	10	3	10	28	17	11	10	43	11	5	25	3	11	36	11	58	22	1
12	Tuesday..	10	54	11	22	15	9	11	30	..	22	7	..	..	0	23	18	9	9
13	Wednesday	11	56	..	14	4	0	0	3	0	41	20	10	0	56	1	34	16	7
14	Thursday	0	37	1	23	14	1	1	25	2	10	20	7	2	18	3	3	16	3
15	Friday ..	2	6	2	44	15	3	2	49	3	27	22	0	3	42	4	20	18	0
16	Saturday.	3	16	3	43	16	10	4	1	4	31	23	11	4	54	5	24	20	5
17	Sunday ..	4	7	4	30	18	4	4	57	5	20	25	10	5	50	6	13	22	9
18	Monday..	4	49	5	9	19	7	5	40	6	0	27	5	6	33	6	53	24	9
19	Tuesday..	5	26	5	44	20	5	6	17	6	35	28	6	7	10	7	28	26	1
20	Wednesday	6	1	6	17	20	10	6	53	7	9	29	0	7	46	8	2	26	9
21	Thursday.	6	32	6	48	21	3	7	26	7	42	29	6	8	19	8	35	27	5
22	Friday ..	7	4	7	19	21	3	7	57	8	12	29	6	8	50	9	5	27	5
23	Saturday.	7	35	7	51	20	10	8	28	8	44	29	0	9	21	9	37	26	9
24	Sunday ..	8	6	8	24	20	0	8	58	9	14	28	0	9	51	10	7	25	5
25	Monday..	8	42	9	1	19	2	9	31	9	48	26	9	10	24	10	41	23	11
26	Tuesday..	9	22	9	44	17	10	10	7	10	26	25	2	11	0	11	19	21	11
27	Wednesday	10	7	10	33	16	7	10	46	11	10	23	8	11	39	..	20	1	1
28	Thursday.	11	3	11	35	15	4	11	40	..	22	1	0	0	3	0	33	18	2
29	Friday ..	..	0	10	15	3	0	0	17	0	56	22	0	1	10	1	49	18	0
30	Saturday..	0	52	1	38	16	5	1	41	2	23	23	5	2	34	3	16	19	9
31	Sunday ..	2	19	2	54	18	6	3	2	3	37	26	0	3	55	4	30	23	0

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 5th, 2h. 20m. p.m. | Full Moon .. 20th, 1h. 57m. p.m.
 First Quarter. 12th, 10h. 3m. a.m. | Last Quarter. 28th, 8h. 34m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.					Llanelly.					Milford Haven.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H. M.	H. M.	P. I.	P. I.		H. M.	H. M.	P. I.	P. I.		H. M.	H. M.	P. I.	P. I.	
1	Friday ..	0 54	1 40	15	11		1 29	2 15	16	5		1 29	2 15	16	5	
2	Saturday..	2 21	2 56	18	0		2 56	3 31	18	6		2 56	3 31	18	0	
3	Sunday ..	3 26	3 55	20	4		4 1	4 30	20	10		4 1	4 30	20	4	
4	Monday..	4 21	4 49	22	2		4 56	5 24	22	8		4 56	5 24	22	8	
5	Tuesday..	5 13	5 37	23	5		5 48	6 12	23	11		5 48	6 12	23	11	
6	Wednesday	6 0	6 23	23	8		6 35	6 58	24	2		6 35	6 58	23	5	
7	Thursday.	6 45	7 7	23	8		7 20	7 42	24	2		7 20	7 42	23	5	
8	Friday ..	7 28	7 50	22	11		8 3	8 25	23	5		8 3	8 25	22	6	
9	Saturday..	8 12	8 33	21	8		8 47	9 8	22	2		8 47	9 8	21	4	
10	Sunday ..	8 54	9 14	19	10		9 29	9 49	20	4		9 29	9 49	19	8	
11	Monday ..	9 38	10 3	17	10		10 13	10 38	18	4		10 13	10 38	17	10	
12	Tuesday..	10 29	10 57	15	11		11 4	11 32	16	5		11 4	11 32	16	1	
13	Wednesday	11 31	..	14	8		..	0 6	15	2		..	0 6	15	0	
14	Thursday.	0 12	0 58	14	6		0 47	1 33	15	0		0 47	1 33	14	10	
15	Friday ..	1 41	2 19	15	6		2 16	2 54	16	0		2 16	2 54	15	5	
16	Saturday..	2 51	3 18	16	10		3 26	3 53	17	4		3 26	3 53	16	11	
17	Sunday ..	3 42	4 5	18	2		4 17	4 40	18	8		4 17	4 40	18	2	
18	Monday..	4 24	4 44	19	3		4 59	5 19	19	9		4 59	5 19	19	2	
19	Tuesday..	5 1	5 19	20	0		5 36	5 54	20	6		5 36	5 54	19	10	
20	Wednesday	5 36	5 52	20	4		6 11	6 27	20	10		6 11	6 27	20	2	
21	Thursday.	6 7	6 23	20	9		6 42	6 58	21	3		6 42	6 58	20	6	
22	Friday ..	6 39	6 54	20	9		7 14	7 29	21	3		7 14	7 29	20	6	
23	Saturday..	7 10	7 26	20	4		7 45	8 1	20	10		7 45	8 1	20	2	
24	Sunday ..	7 41	7 59	19	8		8 16	8 34	20	2		8 16	8 34	19	6	
25	Monday..	8 17	8 36	18	10		8 52	9 11	19	5		8 52	9 11	18	9	
26	Tuesday..	8 57	9 19	17	9		9 32	9 54	18	3		9 32	9 54	17	9	
27	Wednesday	9 42	10 8	16	8		10 17	10 43	17	2		10 17	10 43	16	9	
28	Thursday.	10 38	11 10	15	7		11 13	11 45	16	1		11 13	11 45	15	9	
29	Friday ..	11 45	..	15	6		..	0 20	16	0		..	0 20	15	8	
30	Saturday..	0 27	1 13	16	6		1 2	1 48	17	0		1 2	1 48	16	7	
31	Sunday ..	1 54	2 29	18	4		2 29	3 4	18	10		2 29	3 4	18	3	

The above are in Greenwich Mean Time, if local Time be required for
 Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 5th, 2h. 20m. p.m. | Full Moon .. 20th, 1h. 57m. p.m.
 First Quarter. 12th, 10h. 3m. a.m. | Last Quarter .. 28th, 8h. 34m. a.m.

M. W. D. D.	Newport.					Swansea.					Liverpool.				London.			
	Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.	
	H. M.	H. M.	H. M.	P. I.		H. M.	H. M.	H. M.	P. I.		H. M.	H. M.	H. M.	P. I.	H. M.	H. M.	H. M.	P. I.
1 Fri	2 14	2 56	21	0		1 19	2 5	16	9		7 7	7 48	9 32	10 16				
2 Sat	3 37	4 14	24	4		2 46	3 21	19	2		8 24	8 54	10 58	11 36				
3 Sun	4 47	5 18	28	4		3 51	4 20	21	10		9 20	9 44	..	0 7				
4 Mo	5 45	6 13	31	3		4 46	5 14	23	11		10 6	10 28	0 34	0 59				
5 Tu	6 37	7 2	33	4		5 38	6 2	25	4		10 50	11 13	1 22	1 46				
6 Wd	7 26	7 50	33	8		6 25	6 48	25	7		11 35	11 59	2 7	2 29				
7 Th	8 11	8 33	33	8		7 10	7 32	25	7		..	0 21	2 51	3 14				
8 Fri	8 54	9 15	32	6		7 53	8 15	24	9		0 43	1 5	3 35	3 56				
9 Sat	9 34	9 53	30	6		8 37	8 58	23	4		1 27	1 48	4 17	4 39				
10 Sun	10 12	10 30	27	6		9 19	9 39	21	3		2 8	2 29	5 0	5 21				
11 Mo	10 51	11 13	24	0		10 3	10 28	18	11		2 50	3 16	5 42	6 5				
12 Tu	11 38	..	21	0		10 54	11 22	16	9		3 43	4 14	6 32	7 0				
13 Wd	0 11	0 49	19	0		11 56	..	15	4		4 52	5 34	7 31	8 8				
14 Th	1 33	2 18	18	8		0 37	1 23	15	1		6 23	7 11	8 51	9 36				
15 Fri	2 57	3 35	20	3		2 6	2 44	16	3		7 49	8 22	10 20	10 59				
16 Sat	4 9	4 39	22	7		3 16	3 43	17	10		8 50	9 13	11 34	..				
17 Sun	5 5	5 28	24	9		4 7	4 30	19	4		9 34	9 52	0 3	0 27				
18 Mo	5 48	6 8	26	7		4 49	5 9	20	7		10 8	10 25	0 48	1 7				
19 Tu	6 25	6 43	27	10		5 26	5 44	21	5		10 39	10 55	1 25	1 42				
20 Wd	7 1	7 17	28	4		6 1	6 17	21	10		11 12	11 27	1 57	2 12				
21 Th	7 34	7 50	28	11		6 32	6 48	22	3		11 43	11 59	2 28	2 43				
22 Fri	8 5	8 20	28	11		7 4	7 19	22	3		..	0 15	2 58	3 14				
23 Sat	8 36	8 52	28	4		7 35	7 51	21	10		0 30	0 46	3 29	3 43				
24 Sun	9 6	9 22	27	3		8 6	8 24	21	0		1 3	1 18	3 59	4 15				
25 Mo	9 39	9 56	26	0		8 42	9 1	20	2		1 35	1 52	4 30	4 47				
26 Tu	10 15	10 34	23	11		9 22	9 44	18	10		2 11	2 33	5 5	5 24				
27 Wd	10 54	11 18	22	3		10 7	10 33	17	7		2 55	3 20	5 46	6 10				
28 Th	11 48	..	20	5		11 3	11 35	16	4		3 49	4 25	6 36	7 6				
29 Fri	0 25	1 4	20	3		..	0 10	16	3		5 8	5 51	7 42	8 24				
30 Sat	1 49	2 31	22	0		0 52	1 38	17	5		6 42	7 24	9 8	9 52				
31 Sun	3 10	3 45	24	11		2 19	2 54	19	6		8 0	8 30	10 33	11 11				

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

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PHASES OF THE MOON.

New Moon .. 3rd, 11h. 36m. p.m. | Full Moon .. 19th, 7h. 18m. a.m.
 First Quarter. 11th, 2h. 56m. a.m. | Last Quarter. 26th, 6h. 14m. p.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Monday..	2 49	3 18	26 7	7	4 38	5 10	14 3	3	4 18	4 50	28 0	0
2	Tuesday..	3 47	4 11	28 1	1	5 40	6 5	16 2	2	5 20	5 45	30 8	8
3	Wednesday	4 36	5 2	29 0	0	6 30	6 56	17 3	3	6 10	6 36	32 4	4
4	Thursday.	5 25	5 49	29 2	2	7 20	7 45	17 6	7	7 0	7 25	32 8	8
5	Friday ..	6 12	6 34	29 1	1	8 9	8 30	17 5	5	7 49	8 10	32 6	6
6	Saturday..	6 57	7 18	28 5	5	8 53	9 14	16 7	7	8 33	8 54	31 2	2
7	Sunday ..	7 38	8 1	27 5	5	9 33	9 53	15 3	3	9 13	9 33	29 6	6
8	Monday..	8 23	8 45	26 0	0	10 13	10 32	13 6	6	9 53	10 12	26 10	10
9	Tuesday..	9 7	9 31	24 4	4	10 52	11 13	11 5	5	10 32	10 53	23 1	1
10	Wednesday	9 55	10 22	22 10	10	11 35	..	9 7	7	11 15	11 42	21 1	1
11	Thursday.	10 51	11 23	21 9	9	0 2	0 36	8 2	2	..	0 16	19 0	0
12	Friday ..	11 58	..	21 5	5	1 11	1 49	7 9	9	0 51	1 29	18 6	6
13	Saturday..	0 38	1 18	21 11	11	2 28	3 5	8 5	5	2 8	2 45	19 4	4
14	Sunday ..	1 52	2 21	22 10	10	3 37	4 8	9 7	7	3 17	3 48	21 1	1
15	Monday..	2 48	3 13	23 11	11	4 36	5 4	10 11	11	4 16	4 44	23 0	0
16	Tuesday..	3 35	3 57	24 11	11	5 27	5 50	12 2	2	5 7	5 30	24 10	10
17	Wednesday	4 18	4 36	25 9	9	6 12	6 30	13 3	3	5 52	6 10	26 4	4
18	Thursday.	4 55	5 13	26 3	3	6 49	7 8	13 10	10	6 29	6 48	27 4	4
19	Friday ..	5 31	5 47	26 6	6	7 25	7 43	14 2	2	7 5	7 23	27 10	10
20	Saturday..	6 3	6 22	26 9	9	8 0	8 18	14 6	6	7 40	7 58	28 2	2
21	Sunday ..	6 40	6 57	26 7	7	8 36	8 53	14 3	3	8 16	8 33	28 0	0
22	Monday..	7 14	7 32	26 3	3	9 10	9 27	13 10	10	8 50	9 7	27 4	4
23	Tuesday..	7 53	8 15	25 8	8	9 46	10 6	13 1	1	9 26	9 46	26 8	8
24	Wednesday	8 38	9 1	24 11	11	10 27	10 47	12 2	2	10 7	10 27	24 10	10
25	Thursday.	9 24	9 49	24 0	0	11 7	11 30	11 0	0	10 47	11 10	23 3	3
26	Friday ..	10 15	10 43	23 3	3	11 56	..	10 1	1	11 36	..	21 10	10
27	Saturday..	11 15	11 49	22 11	11	0 27	1 2	9 8	8	0 7	0 42	21 3	3
28	Sunday ..	..	0 28	23 5	5	1 39	2 18	10 4	4	1 19	1 58	22 2	2
29	Monday..	1 8	1 45	24 6	6	2 56	3 31	11 8	8	2 36	3 11	24 0	0
30	Tuesday..	2 17	2 48	25 11	11	4 3	4 36	13 5	5	3 43	4 16	26 8	8

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 3rd, 11h. 36m. p.m. | Full Moon .. 19th, 7h. 18m. a.m.
 First Quarter. 11th, 2h. 56m. a.m. | Last Quarter. 26th, 6h. 14m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Monday ..	3 24	3 53	20 9	4 10	4 42	28 11	5 3	5 35	26 7			
2	Tuesday..	4 22	4 46	22 8	5 12	5 37	31 3	6 5	6 30	29 7			
3	Wednesday	5 11	5 37	23 9	6 2	6 28	32 7	6 55	7 21	31 3			
4	Thursday..	6 0	6 24	24 0	6 52	7 17	32 11	7 45	8 10	31 7			
5	Friday ..	6 47	7 9	23 11	7 41	8 23	32 9	8 34	8 55	31 5			
6	Saturday..	7 32	7 53	23 1	8 25	8 46	31 8	9 18	9 39	30 1			
7	Sunday ..	8 13	8 36	21 10	9 5	9 25	30 2	9 58	10 18	28 3			
8	Monday...	8 58	9 20	20 0	9 45	10 4	28 0	10 38	10 57	25 5			
9	Tuesday..	9 42	10 6	17 11	10 24	10 45	25 3	11 17	11 38	22 1			
10	Wednesday	10 30	10 57	16 1	11 7	11 34	23 0	12 0	..	19 3			
11	Thursday..	11 26	11 58	14 8	..	0 8	21 3	0 27	1 1	17 1			
12	Friday ..	..	0 33	14 3	0 43	1 21	20 9	1 36	2 14	16 5			
13	Saturday..	1 13	1 53	14 11	2 0	2 37	21 6	2 53	3 30	17 5			
14	Sunday ..	2 27	2 56	16 1	3 9	3 40	23 0	4 2	4 33	19 3			
15	Monday..	3 23	3 48	17 5	4 8	4 36	24 8	5 1	5 29	21 4			
16	Tuesday..	4 10	4 32	18 8	4 59	5 22	26 3	5 52	6 15	23 4			
17	Wednesday	4 53	5 11	19 9	5 44	6 2	27 6	6 37	6 55	24 11			
18	Thursday..	5 30	5 48	20 4	6 21	6 40	28 4	7 14	7 33	25 11			
19	Friday ..	6 6	6 22	20 8	6 57	7 15	28 9	7 50	8 8	26 5			
20	Saturday..	6 38	6 57	21 0	7 32	7 50	29 1	8 25	8 43	26 11			
21	Sunday ..	7 15	7 32	20 9	8 8	8 25	28 11	9 1	9 18	26 7			
22	Monday..	7 49	8 7	20 4	8 42	8 59	28 4	9 35	9 52	25 11			
23	Tuesday..	8 28	8 50	19 7	9 18	9 38	27 5	10 11	10 31	24 9			
24	Wednesday	9 13	9 36	18 8	9 59	10 19	26 3	10 52	11 12	23 4			
25	Thursday..	9 59	10 24	17 6	10 39	11 2	24 10	11 32	11 55	21 6			
26	Friday ..	10 50	11 18	16 7	11 27	11 59	23 8	..	0 20	20 1			
27	Saturday..	11 50	..	16 2	..	0 34	23 2	0 52	1 27	19 5			
28	Sunday ..	0 24	1 3	16 10	1 11	1 50	23 11	2 4	2 43	20 5			
29	Monday..	1 43	2 20	18 2	2 28	3 3	25 6	3 21	3 56	22 5			
30	Tuesday..	2 52	3 23	19 11	3 35	4 8	27 10	4 28	5 1	25 3			

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 3rd, 11h. 36m. p.m. | Full Moon .. 19th, 7h. 18m. a.m.
 First Quarter. 11th, 2h. 56m. a.m. | Last Quarter. 26th, 6h. 14m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.					Llanelly.					Milford Haven.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Monday..	2	59	3	28	20	3	3	34	4	3	20	9	3	34	4	3	20	1
2	Tuesday..	3	57	4	21	21	11	4	32	4	56	22	5	4	32	4	56	21	7
3	Wednesday	4	46	5	12	22	11	5	21	5	47	23	5	5	21	5	47	22	6
4	Thursday..	5	35	5	59	23	1	6	10	6	34	23	7	6	10	6	34	22	8
5	Friday ..	6	22	6	44	23	0	6	57	7	19	23	6	6	57	7	19	22	7
6	Saturday..	7	7	7	28	22	4	7	42	8	3	22	10	7	42	8	3	21	11
7	Sunday ..	7	48	8	11	21	3	8	23	8	46	21	9	8	23	8	46	20	11
8	Monday..	8	33	8	55	19	8	9	8	9	30	20	2	9	8	9	30	19	6
9	Tuesday..	9	17	9	41	17	10	9	52	10	16	18	4	9	52	10	16	17	10
10	Wednesday	10	5	10	32	16	2	10	40	11	7	16	8	10	40	11	7	16	4
11	Thursday..	11	1	11	33	15	0	11	36	..	15	6	11	36	..	15	3	15	3
12	Friday ..	..	0	8	14	7	0	0	8	0	43	15	1	0	8	0	43	14	11
13	Saturday..	0	48	1	28	15	2	1	23	2	3	15	8	1	23	2	3	15	5
14	Sunday ..	2	2	2	31	16	2	2	37	3	6	16	8	2	37	3	6	16	4
15	Monday..	2	58	3	23	17	5	3	33	3	58	17	11	3	33	3	58	17	5
16	Tuesday..	3	45	4	7	18	6	4	20	4	42	19	0	4	20	4	42	18	5
17	Wednesday	4	28	4	46	19	5	5	3	5	21	19	11	5	3	5	21	19	3
18	Thursday..	5	5	5	23	19	11	5	40	5	58	20	5	5	40	5	58	19	9
19	Friday ..	5	41	5	57	20	2	6	16	6	32	20	8	6	16	6	32	20	0
20	Saturday..	6	13	6	32	20	6	6	48	7	7	21	0	6	48	7	7	20	3
21	Sunday ..	6	50	7	7	20	3	7	25	7	42	20	9	7	25	7	42	20	1
22	Monday..	7	24	7	42	19	11	7	59	8	17	20	5	7	59	8	17	19	9
23	Tuesday..	8	3	8	25	19	3	8	38	9	0	19	9	8	38	9	0	19	2
24	Wednesday	8	48	9	11	18	6	9	23	9	46	19	0	9	23	9	46	18	5
25	Thursday..	9	34	9	59	17	6	10	9	10	34	18	0	10	9	10	34	17	6
26	Friday ..	10	25	10	53	16	8	11	0	11	28	17	2	11	0	11	28	16	9
27	Saturday..	11	25	11	59	16	3	12	0	..	16	9	12	0	..	16	5	16	5
28	Sunday ..	..	0	38	16	10	10	0	34	1	13	17	4	0	34	1	13	16	11
29	Monday..	1	18	1	55	18	0	1	53	2	30	18	6	1	53	2	30	18	0
30	Tuesday..	2	27	2	58	19	7	3	2	3	33	20	1	3	2	3	33	19	5

The above are in Greenwich Mean Time, if local Time be required for
 Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 3rd, 11h. 36m. p.m. | Full Moon .. 19th, 7h. 18m. a.m.
 First Quarter. 11th, 2h. 56m. a.m. | Last Quarter. 26th, 6h. 14m. p.m.

M. D.	W. D.	Newport.				Swansea.				Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Mo	4 18	4 50	28 3	3 24	3 53	21 9	8 57	9 22	11 43	..	..	..	11 43	..	..	..
2	Tu	5 20	5 45	30 11	4 22	4 46	23 8	9 45	10 6	0 10	0 36	..	..	0 10	0 36	..	..
3	Wd	6 10	6 36	32 6	5 11	5 37	24 9	10 26	10 49	1 0	1 22	..	..	1 0	1 22	..	..
4	Th	7 0	7 25	32 10	6 0	6 24	25 0	11 11	11 34	1 44	2 6	..	..	1 44	2 6	..	..
5	Fri	7 49	8 10	32 8	6 47	7 9	24 11	11 58	..	2 27	2 50	..	..	2 27	2 50	..	..
6	Sat	8 33	8 54	31 5	7 32	7 53	24 1	0 20	0 43	3 13	3 34	..	..	3 13	3 34	..	..
7	Sun	9 13	9 33	29 9	8 13	8 36	22 10	1 5	1 25	3 56	4 17	..	..	3 56	4 17	..	..
8	Mo	9 53	10 12	27 3	8 58	9 20	21 0	1 47	2 8	4 37	4 59	..	..	4 37	4 59	..	..
9	Tu	10 32	10 53	24 0	9 42	10 6	18 11	2 30	2 53	5 21	5 43	..	..	5 21	5 43	..	..
10	Wd	11 15	11 42	21 6	10 30	10 57	17 1	3 19	3 46	6 8	6 35	..	..	6 8	6 35	..	..
11	Th	..	0 16	19 5	11 26	11 58	15 8	4 18	4 57	7 3	7 35	..	..	7 3	7 35	..	..
12	Fri	0 51	1 29	18 10	..	0 33	15 3	5 36	6 19	8 13	8 53	..	..	8 13	8 53	..	..
13	Sat	2 8	2 45	19 9	1 13	1 53	15 11	7 1	7 37	9 32	10 11	..	..	9 32	10 11	..	..
14	Sun	3 17	3 48	21 6	2 27	2 56	17 1	8 6	8 32	10 47	11 18	..	..	10 47	11 18	..	..
15	Mo	4 16	4 44	23 4	3 23	3 48	18 5	8 56	9 17	11 45	..	..	..	11 45	..	..	..
16	Tu	5 7	5 30	25 2	4 10	4 32	19 8	9 35	9 53	0 9	0 31	..	..	0 9	0 31	..	..
17	Wd	5 52	6 10	26 9	4 53	5 11	20 9	10 11	10 26	0 50	1 9	..	..	0 50	1 9	..	..
18	Th	6 29	6 48	27 8	5 30	5 48	21 4	10 42	11 0	1 28	1 44	..	..	1 28	1 44	..	..
19	Fri	7 5	7 23	28 1	6 6	6 22	21 8	11 16	11 32	2 0	2 16	..	..	2 0	2 16	..	..
20	Sat	7 40	7 58	28 5	6 38	6 57	22 0	11 49	..	2 32	2 48	..	..	2 32	2 48	..	..
21	Sun	8 16	8 33	28 3	7 15	7 32	21 9	0 8	0 26	3 4	3 22	..	..	3 4	3 22	..	..
22	Mo	8 50	9 7	27 8	7 49	8 7	21 4	0 43	1 1	3 39	3 56	..	..	3 39	3 56	..	..
23	Tu	9 26	9 46	26 7	8 28	8 50	20 7	1 19	1 39	4 13	4 31	..	..	4 13	4 31	..	..
24	Wd	10 7	10 27	25 2	9 13	9 36	19 8	2 0	2 23	4 51	5 13	..	..	4 51	5 13	..	..
25	Th	10 47	11 10	23 6	9 59	10 24	18 6	2 47	3 11	5 36	6 1	..	..	5 36	6 1	..	..
26	Fri	11 36	..	22 3	10 50	11 18	17 7	3 39	4 10	6 27	6 56	..	..	6 27	6 56	..	..
27	Sat	0 7	0 42	21 8	11 50	..	17 2	4 47	5 26	7 27	8 3	..	..	7 27	8 3	..	..
28	Sun	1 19	1 58	22 7	0 24	1 3	17 10	6 8	6 51	8 43	9 23	..	..	8 43	9 23	..	..
29	Mo	2 36	3 11	24 4	1 43	2 20	19 2	7 29	8 1	10 1	10 38	..	..	10 1	10 38	..	..
30	Tu	3 43	4 16	27 1	2 52	3 23	20 11	8 29	8 56	11 12	11 41	..	..	11 12	11 41	..	..

The above are in Greenwich Mean Time, if local time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 3rd, 10h. 41m. a.m. | Full Moon .. 18th, 11h. 50m. p.m.
 First Quarter. 10th, 11h. 12m. p.m. | Last Quarter. 26th, 2h. 34m. a.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Wednesday	3 17	3 47	27	2	5 9	5 40	15	0	4 49	5 20	29	0
2	Thursday	4 16	4 43	27	10	6 9	6 37	15	10	5 49	6 17	30	3
3	Friday	5 7	5 34	27	11	7 2	7 28	15	11	6 42	7 8	30	5
4	Saturday	5 55	6 19	28	0	7 51	8 15	16	0	7 31	7 55	30	6
5	Sunday	6 42	7 5	27	8	8 38	9 1	15	7	8 18	8 41	29	11
6	Monday	7 25	7 46	26	10	9 20	9 39	14	7	9 0	9 19	28	4
7	Tuesday	8 6	8 29	25	10	9 58	10 19	13	4	9 38	9 59	26	6
8	Wednesday	8 50	9 10	24	9	10 37	10 56	12	0	10 17	10 36	24	6
9	Thursday	9 33	9 53	23	8	11 14	11 33	10	7	10 54	11 13	22	7
10	Friday	10 14	10 37	22	8	11 54	..	9	4	11 34	11 59	20	9
11	Saturday	11 4	11 32	21	11	0 19	0 50	8	5	..	0 30	19	4
12	Sunday	..	0 5	21	9	1 21	1 56	8	2	1 1	1 36	19	0
13	Monday	0 37	1 13	22	2	2 27	3 1	8	9	2 7	2 41	19	11
14	Tuesday	1 47	2 18	22	11	3 33	4 4	9	8	3 13	3 44	21	3
15	Wednesday	2 46	3 11	23	10	4 34	5 1	10	10	4 14	4 41	22	10
16	Thursday	3 32	3 57	24	9	5 25	5 50	12	0	5 5	5 30	24	6
17	Friday	4 18	4 41	25	6	6 12	6 35	12	11	5 52	6 15	25	11
18	Saturday	5 3	5 24	26	1	6 57	7 19	13	8	6 37	6 59	27	0
19	Sunday	5 45	6 4	26	5	7 40	8 1	14	1	7 20	7 41	27	8
20	Monday	6 23	6 44	26	8	8 19	8 40	14	4	7 59	8 20	28	1
21	Tuesday	7 4	7 24	26	8	9 0	9 19	14	4	8 40	8 59	28	1
22	Wednesday	7 47	8 8	26	5	9 40	10 0	14	1	9 20	9 40	27	8
23	Thursday	8 31	8 53	26	0	10 20	10 40	13	6	10 0	10 20	26	10
24	Friday	9 17	9 39	25	3	11 1	11 20	12	7	10 41	11 0	25	6
25	Saturday	10 3	10 28	24	8	11 43	..	11	10	11 23	11 49	24	4
26	Sunday	10 54	11 22	23	11	0 9	0 39	10	11	..	0 19	23	0
27	Monday	11 53	..	23	8	1 10	1 43	10	7	0 50	1 23	22	7
28	Tuesday	0 29	1 6	23	11	2 19	2 54	10	11	1 59	2 34	23	0
29	Wednesday	1 45	2 21	24	8	3 31	4 8	11	10	3 11	3 48	24	4
30	Thursday	2 55	3 25	25	8	4 44	5 17	13	1	4 24	4 57	26	2
31	Friday	3 56	4 27	26	5	5 49	6 21	14	1	5 29	6 1	27	8

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 3rd, 10h. 41m. a.m.	Full Moon .. 18th, 11h. 50m. p.m.
First Quarter. 10th, 11h. 12m. p.m.	Last Quarter. 26th, 2h. 34m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.						Cardiff.						Gloucester.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesdy	3	52	4	22	21	6	4	41	5	12	29	9	5	34	6	5	27	9
2	Thursday.	4	51	5	18	22	4	5	41	6	9	30	10	6	34	7	2	29	1
3	Friday ..	5	42	6	9	22	5	6	34	7	0	31	0	7	27	7	53	29	3
4	Saturday..	6	30	6	54	22	6	7	23	7	47	31	1	8	16	8	40	29	5
5	Sunday ..	7	17	7	40	22	1	8	10	8	33	30	7	9	3	9	26	28	9
6	Monday..	8	0	8	21	21	1	8	52	9	11	29	3	9	45	10	4	27	1
7	Tuesday..	8	41	9	4	19	10	9	30	9	51	27	8	10	23	10	44	25	1
8	Wednesdy	9	25	9	45	18	6	10	9	10	28	26	0	11	2	11	21	23	0
9	Thursday.	10	8	10	28	17	1	10	46	11	5	24	3	11	39	11	58	20	10
10	Friday ..	10	49	11	12	15	10	11	26	11	51	22	9	..	0	19	18	11	11
11	Saturday.	11	39	..	14	11	..	..	0	22	21	6	0	44	1	15	17	5	5
12	Sunday ..	0	7	0	40	14	8	0	53	1	28	21	3	1	46	2	21	17	1
13	Monday..	1	12	1	48	15	3	1	59	2	33	22	0	2	52	3	26	18	0
14	Tuesday..	2	22	2	53	16	2	3	5	3	36	23	2	3	58	4	29	19	5
15	Wednesdy	3	21	3	46	17	4	4	6	4	33	24	6	4	59	5	26	21	2
16	Thursday.	4	7	4	32	18	6	4	57	5	22	26	0	5	50	6	15	23	0
17	Friday ..	4	53	5	16	19	5	5	44	6	7	27	2	6	37	7	0	24	5
18	Saturday.	5	38	5	59	20	2	6	29	6	51	28	1	7	22	7	44	25	7
19	Sunday ..	6	20	6	39	20	7	7	12	7	33	28	7	8	5	8	26	26	3
20	Monday..	6	58	7	19	20	10	7	51	8	12	29	0	8	44	9	5	26	9
21	Tuesday..	7	39	7	59	20	10	8	32	8	51	29	0	9	25	9	44	26	9
22	Wednesdy	8	22	8	43	20	7	9	12	9	32	28	7	10	5	10	25	26	3
23	Thursday.	9	6	9	28	20	0	9	52	10	12	28	0	10	45	11	5	25	5
24	Friday ..	9	52	10	14	19	1	10	33	10	52	26	9	11	26	11	45	23	11
25	Saturday..	10	38	11	8	18	4	11	15	11	41	25	10	..	0	8	22	9	9
26	Sunday ..	11	29	11	57	17	5	..	0	11	24	8	0	34	1	4	21	4	4
27	Monday..	..	0	28	17	1	0	42	1	15	24	3	1	35	2	8	20	10	10
28	Tuesday..	1	4	1	41	17	5	1	51	2	26	24	8	2	44	3	19	21	4
29	Wednesdy	2	20	2	56	18	4	3	3	3	40	25	10	3	56	4	33	22	9
30	Thursday.	3	30	4	0	19	7	4	16	4	49	27	5	5	9	5	42	24	9
31	Friday ..	4	31	5	2	20	7	5	21	5	53	28	7	6	14	6	46	26	3

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.
 For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 3rd, 10h. 41m. a.m. | Full Moon .. 18th, 11h. 50m. p.m.
 First Quarter. 10th, 11h. 12m. p.m. | Last Quarter. 26th, 2h. 34m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	3	27	3	57	20	11	4	2	4	32	21	5
2	Thursday	4	26	4	53	21	8	5	1	5	28	22	2
3	Friday ..	5	17	5	44	21	9	5	52	6	19	22	3
4	Saturday..	6	5	6	29	21	10	6	40	7	4	22	4
5	Sunday ..	6	52	7	15	21	6	7	27	7	50	22	0
6	Monday ..	7	35	7	56	20	7	8	10	8	31	21	1
7	Tuesday..	8	16	8	39	19	6	8	51	9	14	20	0
8	Wednesday	9	0	9	20	18	4	9	35	9	55	18	10
9	Thursday	9	43	10	3	17	1	10	18	10	38	17	7
10	Friday ..	10	24	10	47	16	0	10	59	11	22	16	6
11	Saturday..	11	14	11	42	15	2	11	49	..	15	8	11
12	Sunday ..	..	0	15	15	0	0	0	17	0	50	15	6
13	Monday..	0	47	1	23	15	6	1	22	1	58	16	0
14	Tuesday..	1	57	2	28	16	3	2	32	3	3	16	9
15	Wednesday	2	56	3	21	17	4	3	31	3	56	17	10
16	Thursday	3	42	4	7	18	4	4	17	4	42	18	10
17	Friday ..	4	28	4	51	19	1	5	3	5	26	19	7
18	Saturday..	5	13	5	34	19	9	5	48	6	9	20	3
19	Sunday ..	5	55	6	14	20	1	6	30	6	49	20	7
20	Monday..	6	33	6	54	20	4	7	8	7	29	20	10
21	Tuesday..	7	14	7	34	20	4	7	49	8	9	20	10
22	Wednesday	7	57	8	18	20	1	8	32	8	53	20	7
23	Thursday	8	41	9	3	19	8	9	16	9	38	20	2
24	Friday ..	9	27	9	49	18	10	10	2	10	24	19	4
25	Saturday..	10	13	10	38	18	2	10	48	11	13	18	8
26	Sunday ..	11	4	11	32	17	5	11	39	..	17	11	11
27	Monday..	..	0	3	17	1	0	0	7	0	38	17	7
28	Tuesday..	0	39	1	16	17	5	1	14	1	51	17	11
29	Wednesday	1	55	2	31	18	2	2	30	3	6	18	8
30	Thursday	3	5	3	35	19	3	3	40	4	10	19	9
31	Friday ..	4	6	4	37	20	1	4	41	5	12	20	7

The above are in Greenwich Mean Time, if local Time be required for
 Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 3rd, 10h. 41m. a.m. | Full Moon .. 18th, 11h. 50m. p.m.
 First Quarter. 10th, 11h. 12m. a.m. | Last Quarter. 26th, 2h. 34m. a.m.

M. D.	W. D.	Newport.					Swansea.					Liverpool.				London.			
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.	
		H. M.	H. M.	H. M.	P. I		H. M.	H. M.	H. M.	P. I		H. M.	H. M.	H. M.	P. I	H. M.	H. M.	H. M.	P. I
1	Wd	4 49	5 20	29	3		3 52	4 22	22	6		9 21	9 45	..	..	0 9	0 9	0 9	..
2	Th	5 49	6 17	30	6		4 51	5 18	23	4		10 9	10 32	0 35	1 0	0 35	1 0	0 35	1 0
3	Fri	9 42	7 8	30	8		5 42	6 9	23	5		10 54	11 19	1 26	1 50	1 26	1 50	1 26	1 50
4	Sat	7 31	7 55	30	9		6 30	6 54	23	6		11 41	..	2 11	2 35	2 11	2 35	2 11	2 35
5	Sun	8 18	8 41	30	2		7 17	7 40	23	1		0 5	0 28	2 56	3 19	2 56	3 19	2 56	3 19
6	Mo	9 0	9 19	28	7		8 0	8 21	22	1		0 52	1 12	3 41	4 4	3 41	4 4	3 41	4 4
7	Tu	9 38	9 59	26	11		8 41	9 4	20	10		1 32	1 52	4 24	4 44	4 24	4 44	4 24	4 44
8	Wd	10 17	10 36	24	11		9 25	9 45	19	6		2 14	2 35	5 4	5 27	5 4	5 27	5 4	5 27
9	Th	10 54	11 13	22	11		10 8	10 28	18	1		2 57	3 21	5 49	6 12	5 49	6 12	5 49	6 12
10	Fri	11 34	11 59	21	2		10 49	11 12	16	10		3 43	4 8	6 37	7 0	6 37	7 0	6 37	7 0
11	Sat	..	0 30	19	9		11 39	..	15	11		4 38	5 13	7 25	7 55	7 25	7 55	7 25	7 55
12	Sun	1 1	1 36	19	5		0 7	0 40	15	8		5 48	6 27	8 29	9 5	8 29	9 5	8 29	9 5
13	Mo	2 7	2 41	20	3		1 12	1 48	16	3		7 0	7 34	9 39	10 10	9 39	10 10	9 39	10 10
14	Tu	3 13	3 44	21	8		2 22	2 53	17	2		8 3	8 29	10 43	11 14	10 43	11 14	10 43	11 14
15	Wd	4 14	4 41	23	2		3 21	3 46	18	4		8 54	9 15	11 42	..	11 42	..	11 42	..
16	Th	5 5	5 30	24	11		4 7	4 32	19	6		9 34	9 53	0 7	0 29	0 7	0 29	0 7	0 29
17	Fri	5 52	6 15	26	3		4 53	5 16	20	5		10 11	10 30	0 48	1 9	0 48	1 9	0 48	1 9
18	Sat	6 37	6 59	27	4		5 38	5 59	21	2		10 50	11 10	1 28	1 48	1 28	1 48	1 28	1 48
19	Sun	7 20	7 41	27	11		6 20	6 39	21	7		11 30	11 50	2 7	2 26	2 7	2 26	2 7	2 26
20	Mo	7 59	8 20	28	4		6 58	7 19	21	10		..	0 9	2 46	3 5	2 46	3 5	2 46	3 5
21	Tu	8 40	8 59	28	4		7 39	7 59	21	10		0 30	0 51	3 23	3 43	3 23	3 43	3 23	3 43
22	Wd	9 20	9 40	27	11		8 22	8 43	21	7		1 11	1 33	4 3	4 23	4 3	4 23	4 3	4 23
23	Th	10 0	10 20	27	3		9 6	9 28	21	0		1 53	2 16	4 45	5 6	4 45	5 6	4 45	5 6
24	Fri	10 41	11 0	25	10		9 52	10 14	20	1		2 39	3 4	5 29	5 53	5 29	5 53	5 29	5 53
25	Sat	11 23	11 49	24	9		10 38	11 3	19	4		3 28	3 55	6 19	6 44	6 19	6 44	6 19	6 44
26	Sun	..	0 19	23	4		11 29	11 57	18	5		4 26	5 1	7 12	7 43	7 12	7 43	7 12	7 43
27	Mo	0 50	1 23	22	11		..	0 28	18	1		5 35	6 13	8 17	8 52	8 17	8 52	8 17	8 52
28	Tu	1 59	2 34	23	4		1 4	1 41	18	5		6 52	7 27	9 27	10 2	9 27	10 2	9 27	10 2
29	Wd	3 11	3 48	24	9		2 20	2 56	19	4		8 1	8 32	10 36	11 12	10 36	11 12	10 36	11 12
30	Th	4 24	4 57	26	7		3 30	4 0	20	7		9 2	9 28	11 45	..	11 45	..	11 45	..
31	Fri	5 29	6 1	27	11		4 31	5 2	21	7		9 52	10 19	0 15	0 42	0 15	0 42	0 15	0 42

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PORT CHARGES, &c.

APPLEDORE.

Mooring, 1s. Pilotage, as per agreement.

BARNSTAPLE.

Keelage, 4d. per Vessel, large or small. Pilotage, as per agreement.

BIDEFORD.

Harbour Dues.—Vessels discharging at public quay, $\frac{1}{2}$ d. per ton register; Anchorage, 2s. 6d. Pilotage, as per agreement.

BRIDGEWATER.

Definition of Limits.

Within such parts of the Bristol Channel, and adjacent Rivers and Creeks, as lie on the south-east side of, and are comprised within an imaginary straight line drawn from Anchor Head in the county of Somerset, on the east to Watchet, in the same county on the west.

Rates of Pilotage.

From the extreme limits of the navigation, or from any point between such extreme Limits and the outer buoy of the Gore Sand, to the town or to any point between the Black Rock and the town, vessel being safely moored;—

Also from the town to the limits of the navigation, or to any point between the outer buoy of the Gore Sand and the said limits, the following rates, viz. :—

		s.	d.	
On vessels not exceeding 60 tons register		12	0	per Vessel.
" Exceeding 60 tons, and not exceeding 80 tons	.....	1	3	{ per foot of the Vessel's Draft of Water.
" " 80 " 100	.....	2	0	
" " 100 " 125	.....	3	0	"
" " 125 " 150	.....	4	0	"
" " 150 " 200	.....	5	0	"
" " 200 " 250	.....	6	6	"
" " 250 tons	.....	8	0	"

From the outer buoy of the Gore Sand, or from any point between such buoy and Burnham Church, to the town or to any point between the Black Rock and the town, the vessel being safely moored.

Also from the town to the outer buoy of the Gore Sand, or to any point between Burnham Church and the said buoy.

Bridgewater, continued.

		s.	d.	
On vessels not exceeding 60 tons register		9	0	per Vessel.
" Exceeding 60 tons, and not exceeding 80 tons		1	0	{ per foot of the Vessel's Draft of Water.
" " 80 " 100....		1	6	
" " 100 " 125....		2	0	"
" " 125 " 150....		3	0	"
" " 150 " 200....		4	0	"
" " 200 " 250....		5	6	"
" " 250 tons		7	0	"

From Burnham Church, or from any point between Burnham Church and the town, to the town, or to any immediate point, the Vessel being safely moored, and *vice versa*.

		s.	d.	
On Vessels not exceeding 60 tons register		6	0	per Vessel.
" Exceeding 60 tons and not exceeding 80 Tons		0	9	{ per foot of the Vessel's Draft of Water.
" " 80 " 100....		1	0	
" " 100 " 125....		1	6	"
" " 125 " 150....		2	0	"
" " 150 " 200....		3	0	"
" " 200 " 250....		4	6	"
" " 250 Tons		6	0	"

No Vessel exceeding 60 tons register to pay for less than ten feet.

The several Pilotage Rates herein specified are subject to a reduction of one-fourth part, in respect of vessels propelled by steam and vessels towed by steam vessels, provided that if any such vessel shall be propelled by steam, or towed by a steam vessel for a part only of the distance for which any such rate may be payable, the reduction of one-fourth shall be made on such part only of the said rate as shall be proportionate to the distance so propelled or towed.

Towage.

	Vessels under 10ft. draftwater per ton register.	Vessels under 11ft. draftwater per ton register.	Vessels under 12ft. draftwater per ton register.	Vessels above 12ft. draftwater per ton register.
To or from Burnham, Black Rock, or any intermediate place, to or from Bridgewater, one tide's work....	s. d. 0 3	s. d. 0 4	s. d. 0 5	s. d. 0 6
To or from Burnham to Black Rock, Dunball, or Cumbwich, one tide's work	0 1½	0 2	0 3	0 3
To or from Burnham and Highbridge, one tide's work	0 2	0 4	0 5	0 6

Harbour Dues.—One penny per ton register, with 1s. fee for moorage.

*Bridgewater, continued.***Tonnage Rates.**

First Class.—Vessels entering with cargoes or departing with cargoes—

a. d.

INWARDS. —For every ship or other vessel which shall enter the said basin, from any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney, and Sark—per ton measurement ..			0	3
From any other part of Europe, except places within the Straits of Gibralter, and round the North Cape, and from all British Colonies—per ton measurement ..			0	4
From any port or place in Europe round the North Cape, any port or place within the Straits of Gibralter, whether in Europe, Asia, or Africa, and any port or place in the United States of America—per ton measurement			0	6
From any port or place in any other part of the world—per ton measurement			0	8

OUTWARDS. —For every ship or vessel which shall depart from the said basin to any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney, and Sark—per ton measurement			1	0
To any other port of Europe except places within the Straits of Gibralter, and round the North Cape, or to any British Colony—per ton measurement			0	4
To any port or place in Europe round the North Cape, any port or place within the Straits of Gibralter, whether in Europe, Asia, or Africa; any port or place in the United States of America—per ton measurement ..			0	6
To any port or place in any part of the world—per ton measurement			0	8

Second Class.—Vessels entering without cargoes or in ballast

For every ship or other vessel which shall enter into the said basin—per ton measurement	0	2
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Third Class. —For every ship or other vessel with a cargo which shall enter the said basin and depart therefrom without breaking bulk, or which shall discharge and afterwards take on board and depart with the same cargo—per ton measurement			0	4
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And in estimating the dues contained in the schedule, every vessel of less burthen than twenty tons measurement, shall be rated at twenty tons measurement

Extra basin dues for overtime. —For every coal vessel remaining in the basin beyond ten days, for every coasting vessel beyond fourteen days, and for every foreign vessel beyond thirty days from the time of their respectively entering the same—per ton measurement, per month..			0	2
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BRISTOL.

Rates or Fares for Pilotage.

	If 80 and under 100 tons.		If 100 and under 200 tons.		If 200 and under 300 tons.		If 300 and under 500 tons.		If 500 and under 600 tons.		If 600 and under 800 tons.		If 800 and under 1000 tons.		If 1000 tons and upwards.	
	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.
BETWEEN																
Lundy and Coombe	1	1 0	1	8	1	15 0	2	2	2	9 0	2	16	3	3 0	3	10
Lundy and Swansea or Minehead	2	2 0	2	16	3	10 0	4	4	4	18 0	5	12	6	6 0	7	0
Lundy and Bridgewater, Cardiff, or the Holmes	2	12 6	3	10	4	7 6	5	5	6	2 6	7	0	7	17 6	8	15
Lundy and Newport or Kingroad	3	3 0	4	4	5	5 0	6	6	7	7 0	8	8	9	9 0	10	10
Coombe and Minehead	1	1 0	1	8	1	15 0	2	2	2	9 0	2	16	3	3 0	3	10
Coombe and Bridgewater, Cardiff, or the Holmes	1	11 6	2	2	2	12 6	3	3	3	13 6	4	4	4	14 6	5	5
Coombe and Newport or Kingroad	2	2 0	2	16	3	10 0	4	4	4	18 0	5	12	6	6 0	7	0
Minehead and Bridgewater, Cardiff, or the Holmes	0	10 6	0	14	0	17 6	1	1	1	4 6	1	8	1	11 6	1	15
Minehead and Newport or Kingroad ..	1	1 0	1	8	1	15 0	2	2	2	9 0	2	16	3	3 0	3	10
Between any of the following places:—																
Portishead, Kingroad, Hungroad, Broad Pill, Cumberland or Bathurst Basins, and any other of such places*	0	10 0	0	15	1	0 0	1	5	1	10 0	1	15	2	0 0	2	5
Between any two of the following places, viz:—Bridgewater, Cardiff, the Holmes, Newport and Kingroad																
	0	10 6	0	14	0	17 6	1	1	1	4 6	1	8	1	11 6	1	15

* If under 80 tons, 7s. 6d.

*Bristol, continued.***Harbour Dues.**

£ s. d.

For every vessel trading from Africa, Honduras, Surinam, and other ports in South America, the United States of America, the East and West Indies, all the ports within the Straits of Gibraltar, the Southern Whale Fishery, the British Colonies, Portugal, Prussia, Russia, Spain, without the Straits, and Sweden—per ton	0	1	2
For every vessel trading from Flanders, France, without the Straits, Germany, Guernsey, Holland, Jersey, Norway, Poland, and Zealand—per ton	0	0	7
For every vessel trading from Ireland, the Isle of Man, Scotland, or as a Coaster, not including vessels from Cardiff, Newport, and other ports to the eastward of the Holmes—per ton	0	0	5
For every vessel from Cardiff, Newport, or any other port to the eastward of the Holmes (not being vessels one-third part of the lading of which shall consist of coal, scroff, iron, tin, tin plates, grain, copper, bricks, stone-coal, tar, slate, bar, timber, or wood), as follows:—			
If such vessel shall be under forty tons burthen—for each voyage	0	7	6
If such vessel shall be forty tons burthen, and under seventy-five tons—for each voyage	0	12	6
If such vessel shall be seventy-five tons burthen, and under one hundred tons—for each voyage	0	16	0
If such vessel shall be one hundred tons burthen or upwards—for each voyage	1	1	0
For every vessel from Cardiff, Newport, or any other port to the eastward of the Holmes, one-third part of the landing of which shall consist of coal, scroff, iron, tin, tin plates, grain, copper, bricks, stone-coal, tar, slate, bark, timber, or wood, as follows:—			
If such a vessel shall not exceed seventy-five tons burthen for each voyage	0	5	0
If such vessel shall exceed seventy-five tons burthen—for each voyage	0	7	6
N.B.—There are no Dock Rates or other Port Charges payable on vessels leaving the Port of Bristol.			

BRITON FERRY.**Pilotage.**

From outside of Neath Bar.

Vessels under 40 tons register	7s	0d.
Vessels over 40 and under 60 tons register	10s.	0d.
With or without Steam.		

Briton-Ferry, continued.

For vessels over 60 tons register the rates are as follows:—

Draught of Water.	Without Steam.			With Steam.			Draught of Water.	Without Steam.			With Steam.		
	£.	s.	d.	£.	s.	d.		£.	s.	d.	£.	s.	d.
8 feet..	0	11	3	0	8	5	13½ ft. ..	1	2	6	0	16	11
8½ „ ..	0	12	0	0	9	0	14 „ ..	1	8	0	1	1	0
9 „ ..	0	12	6	0	9	5	14½ „ ..	1	13	6	1	5	2
9½ „ ..	0	13	0	0	9	9	15 „ ..	2	1	6	1	11	2
10 „ ..	0	13	6	0	10	2	15½ „ ..	2	10	6	1	18	0
10½ „ ..	0	14	0	0	10	6	16 „ ..	3	1	0	2	5	9
11 „ ..	0	14	6	0	10	11	16½ „ ..	3	12	0	2	14	0
11½ „ ..	0	15	9	0	11	10	17 „ ..	4	5	6	3	4	2
12 „ ..	0	16	10	0	12	8	17½ „ ..	4	19	0	3	14	3
12½ „ ..	0	18	6	0	14	2	18 „ ..	5	13	0	4	5	0
13 „ ..	1	0	6	0	15	5	And 10s. for every ½ ft. over 18 ft.						

Towage.

INWARDS.—Vessels up to 150 tons register...per ton register 1½d.

„ „ „ and upwards „ 2d.

OUTWARDS.—All tonnages alike 2d.

Subject to the General towage regulations of the Port.

Harbour Dues.

Coastwise or Foreign..... 1½d. per ton register.

Layage..... 1s. 6d. each vessel.

Loading Charges.

Trimming coal, on cargo2½d. per ton.

Discharging Ballast.

Without reference to quantity—about 1½. per ton on cargo.

BURRY PORT.**Harbour Dues.**

For every ship, barge, boat, or other vessel, coming into or going out of the harbour of Burry Port, according to its tonnage, the sum of fourpence per ton.

For every ship, barge, boat, or other vessel, running into the inner harbour by stress of weather, and not unloading, the sum of sixpence per ton, and the outer harbour, the sum of fourpence per ton.

Burry Port, continued.

For every ship, barge, boat, or other vessel, coming into the inner harbour from stress of weather, and lying longer than seven days, the sum of threepence per ton per day; and into the outer harbour, the sum of twopence per ton per day.

Stemming Rates.

Vessels not exceeding 20 tons register, 6d.; 50 tons, 1s.; 70 tons, 1s. 6d.; 100 tons, 2s.; exceeding 100 tons, 2s. 6d.

Ballast.

For wheeling, per ton register, Outer Harbour, 1d.; Inner Harbour, 1½d.

For use of planks, barrows, and waggons—

	s.	d.		s.	d.
Not above 100 tons register	1	6	Not above 350 tons register	3	6
" 150	"	2 0	" 400	"	4 0
" 200	"	2 6	Above 400	"	4 6
" 300	"	3 0			

Men to be allowed 1s. for assisting to trip the basket, and the same extra charges for the use of crane and tubs, if required.

For Pilotage, see Llanelly.

BURNHAM.

Harbour Dues, 1d. per ton register, with 1s. fee for Moorage.

Beacons, 4s. per vessel.

Tolls, on coasting vessels, similar to those at Bridgewater; on Foreign trade vessels, 3d. per ton extra.

Pilotage, as per agreement.

CARDIFF.**Pilotage Rates.**

The limit of this Pilotage is the Port of Cardiff and that portion of the Bristol Channel which lies eastward of Lundy Island, up to, and including Kingroad and the River Rhymney to Rhymney Bridge. This Pilotage is not compulsory, but may be obtained over all or any portion of this district, at the discretion of the Masters of Vessels.

Harbour Pilotage.—Every licensed Pilot employed in taking a ship or vessel between any dock or harbour in the port of Cardiff and any point in Cardiff Roads, or *vice versa*, as shall be paid according to the registered tonnage of such vessel, as follows:—

Cardiff, continued.

FOR LADEN VESSELS.				£	s.	d.
If under 60 tons.....				0	5	0
60 tons and under 100 tons				0	7	6
100	"	150 tons	....	0	10	0
150	"	200 tons	....	0	12	6
200	"	250 tons	....	0	15	0
250	"	300 tons	....	0	17	6
300	"	400 tons	....	1	1	0
400	"	500 tons	...	1	5	0
500	"	600 tons	....	1	7	6
600	"	800 tons	....	1	10	0
800	"	1000 tons	....	1	15	0
1000	"	1250 tons	....	2	10	0
1250 tons and upwards.....				3	0	0

Channel Pilotage.—Any ship or vessel sailing to and from the port of Cardiff, upon or in the water of the Bristol Channel between Lundy Island and Kingroad, for which the services of a duly licensed pilot may be required and rendered, shall pay according to the registered tonnage of such vessel, as follows:—

FOR LADEN VESSELS.

				1st Limit.			2nd Limit.			3rd Limit.		
				£	s.	d.	£	s.	d.	£	s.	d.
If under 150 tons				0	15	0	1	5	0	2	0	0
150 tons and under 200 tons ..				0	17	6	1	10	0	2	7	6
200	"	300 tons	....	1	0	0	1	17	6	2	17	6
300	"	400 tons	....	1	5	0	2	5	0	3	5	0
400	"	500 tons	....	1	7	6	2	10	0	3	10	0
500	"	600 tons	....	1	10	0	2	15	0	4	0	0
600	"	800 tons	....	1	15	0	3	0	0	4	7	6
800	"	1000 tons	....	2	0	0	3	15	0	5	10	0
1000	"	1250 tons	....	2	10	0	4	15	0	7	0	0
1250 tons and upwards.....				3	0	0	5	15	0	8	10	0

FIRST LIMIT.—Between Cardiff Roads and Nash or Kingroad, or any point east of Nash, and west of Kingroad.

SECOND LIMIT.—Between Cardiff Roads and Combe, or any point west of Nash and east of Combe.

THIRD LIMIT.—Between Cardiff Roads and Lundy Island, or any point west of Combe.

Any pilot who may be required to remain on board any ship or vessel for the convenience of the captain, master, owner, or agent, after he shall have discharged the duties for which he was engaged, shall be paid ten shillings per day for every day he may be employed,

Cardiff, continued.

and any pilot who may be required to move any ship or vessel from one dock or tidal harbour to another dock or tidal harbour, occupying only one tide, shall be paid for every ship—

	s.	d.
Not exceeding 100 tons register.....	5	0
100 and not exceeding 300	10	0
300 " 500 "	12	6
500 " 800 "	17	6
800 and upwards.....	25	0

Towage.

Inwards, in ballast	1½d. per ton register.
" with cargo	2d. "
Outwards "	2d. per ton.

Town Dues.

Under 60 tons register.....	2s. 5d. per vessel
Above 60 tons register	5s. 0d. "

Loading Charges.

Trimming coal (single deck).....	2½ per ton cargo
" (double deck).....	3d. "
Wharfage on cargo	2d. "

Discharging Ballast.

Vessels under 200 tons.....	5d. per ton on quantity.
200 tons and under 400 tons	6d. "
400 " 600 tons	7d. "
600 " 800 tons	8d. "
800 and upwards	9d. "

Tonnage Rates.—Bute Docks.

FIRST CLASS. —On all sailing, steam, or other vessels, entering from or departing for any port in the United Kingdom, Isle of Man, Jersey, Guernsey, Alderney, and Sark, under 100 tons register	per register ton	0	1½
100 tons and under 200 tons register.....	ditto	0	2
200 tons register and upwards (except steam vessels) ditto	ditto	0	3
Steam vessels 200 tons register and upwards	ditto	0	2

SECOND CLASS. —On all sailing, steam, or other vessels entering from or departing for any port in Europe, between the North Cape and Cape Finisterre	per register ton	0	5
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THIRD CLASS. —On all sailing, steam, or other vessels, entering from, or departing for any other port in Europe, and the Mediterranean	per register ton	0	7
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Cardiff, continued.

FOURTH CLASS.—On all sailing, steam, or other vessels entering from or departing for all other foreign ports whatsoever, per register ton 0 9

FIFTH CLASS.—On all sailing, steam, or other vessels which do not enter within the gates of any dock or basin, but which either discharge or receive passengers, or goods upon or from any pier, landing-place, or jetty per register ton 0 3

SIXTH CLASS.—On all sailing, steam, or other vessels using the Tidal Harbour of the undertakers..... per register ton 0 0½

If any sailing, steam, or other vessel, being of less than 200 tons measurement, shall remain within any dock or basin for a period longer than ten days; or being of 200 tons and less than 400 tons measurement, for a longer period than fourteen days; or being of 400 tons measurement or upwards, for a period longer than twenty-one days, then for the period during which the vessel remains beyond those periods respectively, the further rates following (that is to say):

For the first week, or any part thereof.... per register ton 0 1

For the second week, or any part thereof ditto 0 1½

For every week, or part of a week, beyond the second week ditto 0 2

Penarth Harbour, Dock and Railway.**Harbour Dues.**

Vessels not exceeding 200 tons register, per ton register, ½d.

Vessels above ditto 1d.

Ballast Rates.

Under 100 tons register, 5d. per ton of ballast discharged.

100 and under 200 6d. per ton.

200 and under 400 7d. per ton.

400 and under 600 8d. per ton.

600 and under 800 9d. per ton.

800 and upwards 10d. per ton.

Discharging by night 3d. per ton extra on the quantity so discharged

The Dock Dues and charges are the same as at the Bute Docks, Cardiff.

CARMARTHEN.**Harbour Dues.**

	a.	d.		a.	d.
Vessels under 30 tons	1	0	Vessels 80 to 90 tons	2	6
30 to 60 tons	1	6	90 to 110 tons	3	0
60 to 80 tons	2	0	110 tons and upwards	5	0

Pilotage, as per agreement.

CHEPSTOW.**Harbour Dues.**

One penny per ton register, on all vessels loading or unloading alongside a wharf; also, on all vessels entering or departing the river, if from or to the eastward of the Holmes, 4d.; from or to the westward of the Holmes, 2s. 4d.

Pilotage.—The same as Gloucester.

CLOVELLY.**Harbour Dues.**

Vessels not exceeding 20 tons, 1s.; 20 to 50 tons, 2s.; above 50 tons, $\frac{1}{2}$ d. per ton.

Pilotage, &c., as per agreement.

GLOUCESTER & BERKELEY CANAL.**Rates of Tonnage.**

Charged upon gross and register weight, and on the ton of 20 cwt. of 112 lbs.

IMPORTS.

	Foreign		Coast-wise	
	s.	d.	s.	d.
ALE, beer, porter, cider and perry, per brl. of 36 galls.	0	4	0	4
—ditto, in bottle per dozen	0	1	0	1
Barilla per ton	1	6	1	0
Bricks, for building per 1000	2	0	2	0
— scouring, fire, and tiles per ton	2	0	1	0
Brimstone "	1	6	1	0
Bones and bone ash "	1	0	1	0
Burr stones "}]	1	6	1	0
Clay "	0	6	0	6
Coals "	0	6	0	6
CORN AND MEAL—				
Wheat, and all corn and seed "	1	9	1	6
Flour and other meal "	2	0	2	0
Bran, gurgeons, and shudes "	1	6	1	6
Earths "	1	0	1	0
Gunpowder "	5	0	5	0
Kelp "	1	6	1	6
Marble per ton of 14 cubic ft.	1	6	1	0
Manures per ton	1	0	1	0
METALS AND ORES—				
Copper, spelter, tin, zinc and manganese "	2	0	0	9
Metallic ores "	0	9	0	6
Pig iron, and old or loose iron "	2	0	0	9
All other description of iron "	2	0	0	9

Gloucester and Berkeley Canal, continued.

IMPORTS, continued.

					Foreign.		Coast- ing.	
					s.	d.	s.	d.
Oil cake and locust beans	..	..	per ton		1	6	1	0
Potatoes	..	..	..	..	1	0	1	0
Slates, for roofing	..	..	..	..	2	0	1	6
„ for draining	..	..	..	..	2	0	1	0
„ slabs, for paving, &c.	..	..	..	..	2	0	1	0
Stone, for roads, pitching, lime, chalk, flint,								
gravel, and sand	..	..	..	..	0	6	0	6
for building, block, paving, &c.	..	..	..	..	1	0	1	0
burr stones	..	..	..	..	1	6	1	0
SPIRITS and WINE—	..	..	per pipe, pun. or butt		2	6	2	6
..	..	..	per half ditto, or hogshead		1	3	1	3
..	..	..	all casks under		0	6	0	6
in bottle	..	..	.. per dozen		0	1	0	1
WOOD AND WOOD GOODS—								
Mahogany and fine wood*	..	..	per ton		2	0	2	0
Other timber and poles†	..	..	..	..	1	6	1	6
Lathwood	..	..	per fathom of 4 feet		2	0	2	0
Deals and battens, per Petersburg standard of								
120, 12ft. long, 11 in. wide, and 1½ in. thick					3	4	3	4
Staves, Baltic pipe	..	..	per 120		3	6	3	6
Puncheon and hogshead	..	..	..		3	0	3	0
Quebec standard	..	..	..		1	6	1	6
Barrel	..	..	..		1	0	1	0
West India pun	..	..	..		0	6	0	6
New Brunswick small	..	..	..		0	3	0	3
Laths	..	..	per 1000		0	4	0	4
UNENUMERATED ARTICLES	..	..	per ton		2	0	1	0

EXPORTS.

Bricks of all kinds	..	..	per ton		0	6	0	6
Clays	..	..	..	..	0	6	0	6
Coals	..	..	..	..	0	3	0	3
Corn, flour, and meal..	..	..	..	..	0	6	0	6
METALS AND ORES—								
Metallic ores	..	..	..	..	0	6	0	6
"Puddle-bars," pig-iron, and rough								
cast-iron pipes	..	..	..	..	0	6	0	6
All other description of iron and metals					0	6	0	9
Salt	..	..	..	..	0	6	0	6
UNENUMERATED ARTICLES	..	..	..	..	0	6	1	0

* Mahogany, Oak, Ash, Elm, Beech, and other heavy Timber or Wood, 40 feet to the ton.

† Fir, Pine, Deal, and light woods, 50 feet to the ton.

*Gloucester and Berkeley Canal, continued.***Regulations.**

Tonnage.—One-half of the above Rates shall be charged upon goods conveyed along any part of the canal between the Stroud Junction and Sharpness Point, or the Stroud Junction and Gloucester, excepting goods coming under the operation of the 8th, 9th, or 10th regulations.

If it be proved to the satisfaction of the toll collectors that the full rate of tonnage has been paid upon any goods which have passed along the canal, half the full tonnage only shall be charged on such goods repassing along the canal, unless such half rate shall exceed the amount of the export rate, in which case the export rate upon such goods shall be charged.

All goods brought into the canal for sale, and not sold, and then exported in the same bottom, without being landed, shall only be charged with the import rate.

All goods exported in the same bottom from Sharpness Point, or transhipped there direct for export, shall only be charged with the import rate.

All goods brought into the canal, forming part of a cargo, the original destination of such goods being for any other port than Gloucester, and not landed nor transhipped, shall pass in and out of the canal free of charge, the vessel carrying such goods paying lockage.

All vessels partly laden entering the canal at Sharpness or Gloucester, to complete their cargoes, shall only be charged tonnage rates on the merchandize shipped in the canal, and the usual lockage charges; provided such inward lading is not landed nor transhipped.

All goods brought into the canal at Gloucester or Sharpness, either by land or water conveyance, *and intended for exportation*, shall not be charged the tonnage rates until shipped.

All Corn brought to Gloucester from Stroud by the canal shall pay a rate of 4d. per ton; and all Flour, Bran, and Gurgeons so brought shall pay a rate of 6d. per ton.

All goods brought into the canal at Gloucester, by the Severn, from places above Gloucester, or to the docks at Gloucester, by land carriage, and not conveyed upon the canal below Hempstead Bridge, except goods coming under the 10th regulation, shall pay a rate of 4d. per ton, or the rate by the table, if it be less than 4d.

All goods simply crossing the canal from the South Wales Railway Quay to the yards on the opposite side, lying to the north of the Salk Warehouses, or *vice versa*, not having previously paid canal dues, shall pay a rate of 2d. per ton.

Wharfage.—Goods remaining upon the wharfs (except the wharf specified in the foregoing regulation), for above *forty-eight hours*,

Gloucester and Berkeley Canal, continued.

twopence per ton. And all goods remaining upon any of the wharfs, excepting the north wharf, shall be further charged wharfage at the rate of *twopence* per ton per week, and at that rate for any part of a week they may so remain after the expiration of the forty-eight hours. And all goods remaining upon the "*North Wharf*," shall be further charged wharfage at the rate of *one shilling* per ton per week, and at that rate for any part of a week they may so remain, after the expiration of the forty-eight hours.

All goods deposited upon the wharf underneath the "*Pillar Warehouse*," upon the west side of the basin, and remaining there longer than twenty-four hours, shall be charged 1d. per ton per day.

Goods, carriages of every description, and all other things shall only be placed on the wharfs, roads, and premises of the Canal Company in such manner, and on such parts thereof as the officers of the Company may direct; and if any goods, carriages, or other things shall be placed contrary to their directions, the officers of the Company may remove the same; and wharfage at the rate of 6d. per ton per hour shall be charged, after notice shall have been given to remove the same.

Floatage of Timber.—For Timber discharged from vessels into the canal, on the south side of "*Siller's Bridge*," and remaining afloat on the south side of such bridge, after the expiration of thirty days, a floatage rate of one halfpenny per stick per week shall be paid, and in like proportion for any part of a week; and if such timber should be removed to any part of the canal, on the north side of such bridge, a floatage rate of 1d. per stick for the first week after such removal, and 2d. per stick per week afterwards, and in like proportion for any part of a week, shall be paid.

For timber discharged from vessels into the canal, on the north side of "*Siller's Bridge*," and remaining afloat on the north side of such bridge, after the expiration of fifteen days, a floatage rate of 1d. per stick per week shall be paid, and in like proportion for any part of a week; and should it remain afloat on the north side of such bridge longer than twenty-eight days, after the fifteen days, 2d. per stick per week, and in like proportion for any part of a week, shall be paid.

All timber sold and delivered from one merchant to another, and put into the canal from the yards, and floating in the canal on basins two weeks following, shall pay 2d. per stick per week, and in like proportion for the whole time it may remain afloat. And all timber imported in trows or barges discharged into the canal, shall be subject to the same regulation and charge.

No timber shall be permitted to remain afloat, so as to endanger the navigation of any vessel along the canal, or interrupt or render inconvenient the navigation of the canal.

*Gloucester and Berkeley Canal, continued.***Granage.**

			£	s.	d.	
For each lift under	2 tons	..	0	0	3	per ton.
2 tons and under	5 "	..	0	0	6	"
5 "	7 "	..	0	1	0	"
7 "	10 "	..	0	1	6	"

All lifts exceeding 10 tons can only be made by special agreement with the Company, and at rates not less than the following scale:—

			£	s.	d.	
10 tons and under	11 tons	..	2	0	0	for each lift.
11 "	12 "	..	2	10	0	"
12 "	13 "	..	3	0	0	"
13 "	14 "	..	3	10	0	"
14 "	15 "	..	4	0	0	"

Lockage.—Every vessel passing through the Company's locks empty or in ballast, shall pay 1d. per ton on the register tonnage for each lock of water; and every vessel bringing into, or conveying along the canal, a less quantity of goods than her register tonnage, shall pay 1d. per ton per lock on the difference between the tonnage of the goods on board and the register tonnage of the vessel,—provided that the hold of the vessel is not full.

In all cases of removal of goods, wares, and merchandise, from the Company's wharfs or docks, through the locks, upon which the above rates of tonnage have been paid, such further payment only shall be made as will amount to 1d. per ton on the register tonnage of the vessel departing with such goods.

Moorage.—All vessels remaining in the canal or basins longer than one calendar month, shall be charged upon the register tonnage the following rates, viz.:—one halfpenny per ton per week, if such vessels shall be moored, or remain on the north side of Hempstead Bridge; and one farthing per ton per week, if moored, or remaining in any part of the canal below Hempstead Bridge.

Lockage and Moorage.—Boats and vessels under twenty tons burthen shall be rated as twenty tons.

Weighing Machine Rates.—For coal, manure, stone, and gravel, 2d. per ton; all other goods, 3d. per ton.

Tracking.—The following scale of charges shall be paid by the masters of vessels for tracking, viz.:—

*Gloucester and Berkeley Canal, continued.**For the whole length of the Canal :*

For vessels under 26 tons 8s. 6d. each way.

,, above 26 and not exceeding 150 tons, 4d. per ton.

,, above 150 { for 150 tons 4d. ,,
 for the remainder 2½d. ,,One-half of the above rates shall be paid to and from the Junction,
and ½d. per ton per mile for all intermediate distances.**Ballast.**If put on board at the Ballast Banks s. d.
0 8 per ton.If brought in carts, or alongside afloat, either at
Gloucester, or within two miles thereof..... 1 0 ,,If thus taken in carts or afloat at any other part
of the canal 1 2 ,,

If in the Tidal Basin at Sharpness 1 6 ,,

All Ballast not supplied by the Ballast Contractor will be charged
tonnage at the rate of 6d. per ton.**Canal Pilotage.***The Canal Pilots are authorized to demand and take the following
charges for Piloting Vessels up or down the Canal :—*

Vessels under 75 tons register 5s. 0d. up or down.

Vessels 75 and under 100 tons register..... 7s. 6d. ,,

Register Tonnage.		Draft of Water. ft. in.		Charge. s. d.	Register Tonnage.		Draft of Water. ft. in.		Charge. s. d.
100	..	11 0	..	10 0	375	..	13 9	..	21 0
125	..	11 3	..	11 0	400	..	14 0	..	22 0
150	..	11 6	..	12 0	425	..	14 3	..	23 0
175	..	11 9	..	13 0	450	..	14 6	..	24 0
200	..	12 0	..	14 0	475	..	14 9	..	25 0
225	..	12 3	..	15 0	500	..	15 0	..	26 0
250	..	12 6	..	16 0	525	..	15 3	..	27 0
275	..	12 9	..	17 0	550	..	15 6	..	28 0
300	..	13 0	..	18 0	575	..	15 9	..	29 0
325	..	13 3	..	19 0	600	..	16 0	..	30 0
350	..	13 6	..	20 0					

And 6d. additional for every three inches draft of water above.

Channel and River Pilotage.**LIMIT.**—The Bristol Channel eastward of Lundy Island, including the River
Severn to the City of Gloucester and the River Wye to Chepstow Bridge.Every licensed pilot employed in piloting vessels to or from the
port of Gloucester shall be paid the following Pilotage rates, accord-
ing to the register tonnage of the vessel :—

Gloucester and Berkeley Canal, continued.

			To or from Lundy and					
			Holmes or Cardiff Roads.		Kingroad.		Sharpness.	
			£	s.	d.	£	s.	d.
Under 100 tons			1	10	0	2	0	0
100 tons and under 200			2	0	0	2	10	0
200	"	300	2	7	6	3	0	0
300	"	400	2	15	0	3	10	0
400	"	500	3	5	0	4	2	6
500	"	600	3	15	0	4	15	0
600	"	800	4	5	0	5	7	6
800	"	1000	5	0	0	6	5	0
1000 tons and upwards			5	15	0	7	5	0

			To or from Nash Point or Minehead and Holmes or Cardiff Roads.					
			Kingroad.		Sharpness.			
			£	s.	d.	£	s.	d.
Under 100 tons			1	0	0	1	10	0
100 tons and under 200			1	5	0	1	15	0
200	"	300	1	10	0	2	2	6
300	"	400	1	15	0	2	10	0
400	"	500	2	2	6	3	0	0
500	"	600	2	10	0	3	10	0
600	"	800	2	17	6	4	0	0
800	"	1000	3	7	6	4	12	6
1000 tons and upwards			3	17	6	5	7	6

			To or from Holmes or Cardiff Roads and Kingroad.					
			Sharpness.					
			£	s.	d.	£	s.	d.
Under 100 tons			0	10	0	2	10	0
100 tons and under 200			0	12	6	3	2	6
200	"	300	0	15	0	3	15	0
300	"	400	0	17	6	4	7	6
400	"	500	1	2	6	5	5	0
500	"	600	1	7	6	6	2	6
600	"	800	1	12	6	7	0	0
800	"	1000	1	17	6	8	2	6
1000 tons and upwards			2	2	6	9	7	6

To or from Kingroad or Sharpness:—

	£	s.	d.		£	s.	d.
Under 40 tons	0	15	0	300 tons and under 400	3	10	0
40 tons and under 60	1	1	0	400 500	4	2	6
60 80	1	11	6	500 600	4	15	0
80 100	2	0	0	600 800	5	7	6
100 200	2	10	0	800 1000	6	5	0
200 300	3	0	0	1000 tons and upwards.	7	5	0

Gloucester and Berkeley Canal, continued.

Pilots taken on board any vessel inward bound to the westward of Ilfracombe shall be paid the same Pilotage rates as from Lundy Island; if between the Nash Point and Ilfracombe, the same rates as from the Nash Point; if between the Nash Point and the Holmes, the same rates as from the Nash Point; and if between the Holmes and Kingroad, the same rates as from the Holmes.

Pilots discharged from any vessel on the outward voyage between any of the stages mentioned in the above scale of rates, shall be paid the same Pilotage rates as if they had been taken to the next stage beyond the place where they were discharged.

All vessels Piloted to Chepstow or to Lydney shall pay the same Pilotage Rates as to Sharpness, and vice versa, with the exception of Coal-laden vessels coastwise to and from Lydney, under 200 tons register, for which a special scale of charges, at a reduced rate, is provided by the 4th Pilotage Bye-Law.

Vessels piloted from Sharpness to Lydney, or from Lydney to Sharpness, and then to Kingroad, shall pay the same rates as between Sharpness and Kingroad.

Vessels piloted to and from any place in the River Severn above Sharpness, shall pay one-fourth more than the rates between Sharpness and Kingroad.

All light vessels between Kingroad and Sharpness, or any intermediate point, shall be entitled to one-fifth reduction on the full pilotage charges for that portion of the district; and all vessels propelled or towed wholly by steam power, between Kingroad and Sharpness, or any intermediate point, shall be entitled to a further reduction of one-fourth of the full pilotage charges for that portion of the district.

Vessels taking a Pilot from Kingroad to any place on the River Severn, must employ assistants to the Pilot, whose number and payment are regulated by the 6th Pilotage Bye-Law.

Vessels retaining a Pilot on board after he has discharged the duties for which he was engaged, or whilst waiting for water up the River Severn, or whilst delayed by contrary winds when outward bound, and vessels in charge of a Pilot compelled to bear up and return from the westward from stress of weather or accident, must compensate him according to the regulations contained in the 7th, 8th, and 9th Pilotage Bye-Laws.

In addition to the foregoing charges, a Collector's Fee, varying according to the size of the vessel, from 6d. to 2s. 6d., is payable under the 10th Pilotage Bye-Law.

HAVERFORDWEST.

Keelage and Wharfage.—One penny per ton registered tonnage.

ILFRACOMBE.**Keelage.**

For every ship or vessel driven in by stress of weather, &c.

Coasters belonging to the port..... 0s. 6d.

„ not belonging to the port 1s. 6d.

Vessels going to or coming from any of Her Majesty's Plantations in Asia, Africa, or America, 2s. 6d.

Also, for every vessel paying Keelage, the additional sum of 6d. for each Top borne by such vessel.

Lighthouse.

For every vessel belonging to the port 0s. 6d.

For every vessel not belonging to the port .. 1s. 0d.

The light is kept up from the first day of September to the last day of April in every year.

Mooring Chains and Buoys.

Smacks, 1s. Two-mast vessels, 2s. Foreign-going, 1s. extra.

When the light is out, 6d. each less for vessels belonging to the Harbour, and 1s. each less for vessels not belonging to the Harbour.

Pilot Skiffs 1s., Pilot Yawls and other sailing boats 8d. each time of entering the Harbour.

LLANELLY.**Pilotage.**

LIMIT No. 1.—If a Pilot be taken on board as far to the westward as to bring Rhossilly Church open to the westward of the Holmes, he is to be paid for every foot of water the vessel may draw.

LIMIT No. 2.—If taken on board within No. 1, but to the westward of No. 4 buoy for Pembrey, or No. 6 for Llanelly.

	Limit No. 1.		Limit No. 2.		Outwards.	
	s.	d.	s.	d.	s.	d.
Under 50 tons register ...	1	9	..	1	0	.. 0 6
From 50 to 75 „	2	0	..	1	3	.. 0 9
75 to 100 „	2	3	..	1	6	.. 1 0
100 to 125 „	2	6	..	1	9	.. 1 3
125 to 150 „	2	9	..	2	0	.. 1 6
150 to 175 „	3	0	..	2	3	.. 1 9
175 to 200 „	3	3	..	2	6	.. 2 0
200 to 225 „	3	6	..	2	9	.. 2 3

And 3d. per foot for every additional 25 tons register.

Pilots taken on board inside buoy No. 6, when bound for Llanelly, or inside No. 4, when bound for Pembrey, to be paid 2s. 6d. each for a hobble.

Llanelly, continued.

Every vessel boarded by a Pilot, who may be stationed in the "Ceres" pilot-ship, shall pay as for station No. 1.

If any vessel shall evade being boarded by a Pilot in Limit No. 1, she shall pay for Limit No. 1, although boarded above that limit, beside the penalty for refusing a Pilot.

Each vessel to pay 1s. for the boat.

That when any vessel, not exceeding 125 tons register, shall have the assistance of a steam-tug in taking her out to sea, a reduction of ten per cent. shall be made on her outward Pilotage.

That all vessels proceeding above Llanelly shall pay as follows, in addition to the rates inwards and outwards from Llanelly:—

	To or from Penclawdd.			To or from Spitty.			Penclawdd to Spitty.	
	s.	d.		s.	d.		s.	d.
Under 50 tons register..	3	6	..	5	0	..	3	6
From 50 to 100 "	4	6	..	7	0	..	4	6
100 to 150 "	5	6	..	9	0	..	5	6
150 to 200 "	7	0	..	10	6	..	7	0

And 6d. for every additional 25 tons register.

Harbour Pilotage.

Under 50 tons, 2s.; 50 and under 75, 2s. 6d.; 75 and under 100, 3s.
For removing vessels between

	Llanelly and Pembrey.			Pembrey and Burry Port.	
	s.	d.		s.	d.
Under 50 tons register	3	6	..	3	6
75 "	4	6	..	4	0
100 "	5	6	..	4	6

And 6d. for every additional 25 tons register.

Vessels sailing from the port, and putting back after having discharged their Pilots, to pay half pilotage in and out.

Three shillings and sixpence to be the rate charged for a Bar hobble.

Ballast Rates.

Every vessel shall pay for every ton discharged 5¼d.

For every man otherwise employed ¼d. per ton.

Buoyage Dues.

For every ship or other vessel entering into the Rivers Bury, Loughor, and Lliedi, or either of them, from and over the Bar of Burry, 1d. per ton register, and ¼d. per ton for Light Dues.

*Llanelly, continued.***Dock Dues.**

Llanelly or New Dock 2d. per ton register.

Copper Works' Dock 1d. ,,

Carmarthenshire Dock, 1d., per ton register for vessels entering or using the Dock; and 1d. per ton the first week, and a farthing per ton every week after, if for repairs or lying up.

LYDNEY.**Tonnage Rates.**

	s.	d.		s.	d.
1 to 10 tons burthen ..	1	0	45 to 50 tons burthen ..	4	6
11 to 20 ,, ..	2	0	51 to 80 ,, ..	5	0
21 to 30 ,, ..	3	0	81 to 100 ,, ..	6	0
31 to 44 ,, ..	4	0	101 tons and upwards	7	6

Pilotage.—The same as Gloucester.

MILFORD.**DEFINITION OF LIMITS.**

From Caldy Island along the coast to St. David's Head and from there to Cardigan Island, and *vice versa*; and to and from, and into and out of all ports and places within these Limits.

Pilotage Rates.

Under 12ft. per foot.	14 ft. & Up per foot.
£ s. d.	£ s. d.

From a line drawn from St. Ann's Point to Sheep's Island, to any part of the Harbour below a line drawn from Newton Noyse Point to Martin's Haven 0 2 6 0 3 6

From a line drawn from St. Ann's Point to Sheep's Island, or from Habberstone Road to any place above a line drawn from Newton Noyse Point to Martin's Haven in addition 0 2 0 0 2 6

Vessels inward-bound, not boarded until they have passed a line drawn from Rat Island to Watwick Point, are to pay one-fourth less than the foregoing rates; and if not boarded until they have passed a line drawn from Thorne Island to Great Castle Head, they are to pay one-half only of the said rates; and if not boarded until they have passed the Stack Rock to a line from Newton Noyse Point to Martin's Haven, they are not to be chargeable with any Pilotage, unless the Masters thereof require Pilotage assistance.

*Milford, continued.***Additional Rates.***For Ships boarded without the entrance of the Harbour.*

	£	s.	d.
From a line drawn from Leuny Point to Skokham Island			
in addition, per foot	0	2	0
If to the southward of St. Gowan's Head, ditto	0	1	0
Or from Caldy Island eastward, or from the westward of the Grassholm, or three leagues without Leuny Point, in addition to the Harbour Pilotage	3	3	0
Six leagues, ditto	4	4	0
Ten leagues, ditto	6	6	0

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first-mentioned ships shall, by an order of Her Majesty's Most Honourable Privy Council, be privileged to enter the ports of this Kingdom, upon paying the same duties of tonnage as are paid by British ships; in which case such ships and vessels, not having British registers, shall pay the like rates of Pilotage only as are payable by ships having British registers. The said surplus rate chargeable on unprivileged Foreign vessels is to be paid to the Collector of this Corporation's Light Duties, at the Custom House, Milford.

Port Charges.

	£	s.	d.
Keelage	0	0	4
Making fast to the rings	0	0	6
Quayage and moorage per ton register	0	0	0½
Foreign vessels, loading or discharging, per ton	0	0	6
Coasting vessels, loading or discharging, per ton	0	0	2
Loading ballast, per ton	0	0	2
Deposit for landing ballast on quay	1	0	0
Ballast lying on the quay, per ton	0	0	0½
Use of beach discharging	0	1	0
Use of beach outfitting or repairing, per ton register	0	0	1
Vessels lying alongside the quay for any period not exceeding one month, per ton register	0	0	2
And for every succeeding month	0	10	0

NEATH.**Tonnage Rates.**

For every ship or vessel which shall anchor, load, or unload within the said port, or which shall be made fast to any pier or other work within the same, or any part thereof, the sum of 1½d. per ton of the register tonnage of such ship or vessel.

*Neath, Continued.***Rates of Pilotage.**

From the Outside of Neath Bar into the Port and Harbour of Neath, and *vice versa*.

For the Pilotage of any Vessel.	FIRST STATION, From outside of Neath Bar to the Laver, and to any distance between the Laver and southern end of Abbey Estate, and <i>vice versa</i> .	SECOND STATION From outside of Neath Bar to any distance lying be- tween the inner termination of the First Station and the Abbey Pill, and <i>vice versa</i> .	THIRD STATION From outside of Neath Bar to any distance lying be- tween the Abbey Pill and Neath Bridge, and <i>vice versa</i> .
Tons Register.	s. d.	s. d.	s. d.
Under 80	1 3	1 4	1 6
80 & under 100	1 8	1 9	2 0
100 „ 125	1 10	2 0	2 3
125 „ 150	2 0	2 3	2 6
150 „ 175	2 3	2 6	3 0
175 „ 200	2 6	2 9	3 3
200 „ 225	2 9	3 0	3 6
225 „ 250	3 0	3 3	4 0
250 „ 300	3 3	3 6	4 3
300 „ 350	3 6	4 0	5 0
350 & upwards..	4 0	4 3	5 6
	Per foot of the Vessel's Draft of Water.	Per foot of the Vessel's Draft of Water.	Per foot of the Vessel's Draft of Water.

 No Vessel to pay for less than Seven Feet.

The several Pilotage Rates herein specified are subject to a reduction of one-fourth part in respect of Vessels propelled by Steam and Vessels towed by Steam Vessels; provided that if any such Vessel shall be propelled by Steam, or towed by a Steam Vessel for a part only of the distance for which any such rate may be payable, the reduction of one-fourth shall be made on such part only of the said rate as shall be proportionate to the distance so propelled or towed.

For conducting vessels from one station to another station within the Port:—

	s. d.
Vessels under 100 tons	3 0
„ over 100 tons and under 150 ..	4 0
„ „ 150 „ „ 200 ..	5 0
„ „ 250 „ „ ..	8 0

Neath, continued.

To or from the Mumbles:—	s.	d.
Vessels under 250 tons	4	0 extra.
„ over 250 „	7	0 „

Pilot Boats and Hobbler's Fees, 5s., which is included in the rates.

Ships not having British Registers are to pay one-fourth more than ships having British Registers, except when such first-mentioned ships shall, by any Order of Her Majesty's Most Honourable Privy Council, be privileged to enter the ports of this kingdom, upon paying the same duties of tonnage as are paid by British ships, in which case such ships and vessels not having British Registers shall pay the like rates of pilotage only as are payable by ships having British Registers.

Pilot leading the way (if required by the master of the vessel following), entitled to half-pilotage as far as he shall lead.

Rates to Hobblers. s. d.

Hobblers over the Bar, to or from the Laver or Giant's Grave, or the southern end of the Abbey Estate..	2	6 per vessel.
Hobblers over the Bar, to or from Fox's Coal Bank, or the Copper Works, or the Abbey Pill.....	3	0 „
Hobblers over the Bar, to or from Melincrythan Wharf or Neath Bridge	4	0 „
Hobblers employed in removing or assisting vessels within the Harbour	1	6 per tide.

Towage Rates and Regulations.

	Per ton register.	
	s.	d.
INWARDS.		
From the Outer Buoy to Laver or Giant's Grave	0	1½
„ „ Abbey Coal or Crown Copper Works	0	1½
„ „ Mines Royal Copper Works	0	2
„ „ Neath	0	2½
From Mumbles Roadstead to Giant's Grave.....	0	4
OUTWARDS.		
From Giant's Grave or the Laver to Sea or Outward Buoy	0	2
„ Abbey Coal or Crown Copper Works to Sea or Outward Buoy	0	2½
„ Abbey Pill or Mines Royal Copper Works to Sea or Outward Buoy	0	2½
„ Neath to Sea or Outward Buoy.....	0	2½
From Giant's Grave to Mumbles Roadstead.....	0	5

Vessels that may require to be towed shorter distances, if not having been offered the steamer to tow them the whole distance from where they were laden or going to load, to pay as under:—

	s.	d.
From the Layer to Giant's Grave, and vice versa	0	0½
" Abbey Coal or Crown Copper Works	0	1
" Abbey Pill or Mines Royal Copper Works..	0	1½
" Neath	0	1½
From Giant's Grave to Abbey Coal or Crown Copper Works..	0	0½
" Abbey Pill or Mines Royal Copper Works	0	1
" Neath	0	1½
From Abbey Coal or Crown Copper Works to the Pill	0	0½
" " " " " Neath	0	1
Light Vessels towed from Swansea or Port Talbot to Giant's Grave	0	2
Light Vessels towed to Abbey Coal or Crown Copper Works, when done in one tide.....	0	2½
Light Vessels towed from Neath Harbour to Swansea or Port Talbot	0	6
Loaded Vessels towed to Swansea or Port Talbot (in addition to the rate of towage from the various stations to the Outward Buoy)	0	3
Vessels from 150 tons register and upwards, for towage in or out, to or from Giant's Grave	0	2
All vessels not exceeding thirty tons register to pay 3s. 6d. for towage in or out, to or from Giant's Grave.		
Three shillings the lowest rate for any towage.		
Vessels of 150 tons register and upwards one half-penny per ton above these rates for all inward towage.		

Tonnage Rates.

Coastwise, $\frac{1}{4}$ d. per ton register. Foreign, $\frac{1}{4}$ d. per ton register.

One penny per ton taken on discharged, at the Wharves in the River.

INWARDS.—For every ship or other vessel which shall enter the said dock from any part of Great Britain, Ireland, the Isle of Man, or any part of the Islands of Guernsey, Jersey, Alderney, and Sark, per ton measurement	0	2
For every other part of Europe, except places within the Straits of Gibraltar and round the North Cape, per ton measurement..	0	5
From any port or place in Europe round the North Cape, or any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa, per ton measurement	0	7
From any port or place in British America, any port or place in the United States of America, or any port or place in any other part of the world, per ton measurement	0	10

Newport, continued.

	s.	d.
For every ship or other vessel, with a cargo, which shall enter the said dock, and depart therefrom, within three weeks from the day of entry, without breaking bulk, or which shall discharge and afterwards take on board, and depart with the same cargo, within such period of 3 weeks, per ton measurement (exclusive of the dues under the name of "Rent," hereinafter mentioned)	0	6
For every ship or other vessel which shall have departed from the said dock with a cargo, or any part of such cargo laden therein, and shall re-enter the said dock with the same cargo, or part of such cargo, per ton measurement (exclusive of the dues under the name of "Rent" hereinafter mentioned)....	0	3
OUTWARDS.—For every ship or other vessel which shall depart from the said dock to any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney, and Sark, per ton measurement	0	2
To any other part of Europe, except places within the Straits of Gibraltar and round the North Cape, per ton measurement	0	5
To any port or place in Europe, round the North Cape, or any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa, per ton measurement	0	7
To any port or place in British America, any port or place in the United States of America, or any port or place in any other part of the world, per ton measurement	0	10
For every ship or other vessel which shall enter the said dock in ballast, or light, and depart therefrom in ballast, or light, per ton measurement (exclusive of the dues under the name of "Rent," hereinafter mentioned)	0	3

Police and Watchmen.

For all vessels entering or departing from the dock, at per week, or fractional part of a week	1	0
N.B.—Competent watchmen for the protection of vessels and property therein can be obtained on application at the dock-office; the charge for each watchman is per night	3	6

Rent Charges.

All ships and vessels entering the dock in ballast, and departing with cargoes, not exceeding 400 tons register measurement, to be allowed to remain at the rates before specified for a period of	2	weeks
Above 400 tons and not exceeding 700 tons register measurement	3	"
Above 700 tons register measurement	4	"

Newport, continued.

Vessels above 70 tons and not exceeding 700 tons register measurement entering with a cargo and going out with another	4 weeks
Vessels above 700 tons register measurement entering with a cargo and going out with another	5 "
Vessels above 70 tons register measurement entering with a cargo and going out without breaking bulk, or which shall discharge, and afterwards take on board and depart with the same cargo	3 "
Vessel under 70 tons register measurement, entering the dock without ballast.. .. .	4 days

All ships and vessels which shall remain in the dock for any longer periods than those respectively above stated, shall be subject (in addition to the rates and dues before stated) to a rent-charge of, for the first week, or any portion of a week, per ton register measurement	0 0½
For the second week, or any portion of a week, per ton register measurement	0 1
For the third week, or any portion of a week, per ton register measurement	0 1½
For the fourth week, and every subsequent week, and for any portion of a week, per ton measurement	0 2
N.B.—In estimating the dues contained in the foregoing schedule, every vessel of less than 20 tons register measurement shall be rated at 20 tons register measurement	

Use of Machinery for Shipping or Unshipping.

For every ton of coal	0 1½
For every ton of coke, culm, iron, cinders, iron ore, earth, or rubbish of any kind	0 2½
For every ton of metallic (not iron) ore	0 3
Whenever waggons containing any of the above articles are moved on the railway/sidings by hydraulic power in connection with the shipping machines, a charge will be made at the rate per ton of	0 1
All articles, matters, or things not included in the above-mentioned, and excepting ballast, will be subject to special agreement and charges.	
Persons (other than the crews of vessels in the dock), landing or embarking on the Dock Company's premises, will be subject to a charge per head of	0 1

Charges for Discharging and Removing Ballast.

For every ton of ballast that is in the hold within 15 feet abaft, and 15 feet before any hatchway	1 0
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Newport, continued.

For every ton of ballast exceeding in the hold a greater distance than stated above, an additional sum of 0 2
 An additional charge for working by night will be made at the rate of per ton 0 3

Rates of Pilotage.

The Limit of this Pilotage is that portion of the Bristol Channel which lies eastward of Lundy Island, up to, and includes Kingroad and the River Usk as far as the Caerleon Bridge. This Pilotage is not compulsory, but may be obtained over all or any portion of this district, at the discretion of the masters of vessels.

Every licensed Pilot employed in piloting vessels to or from the port of Newport, shall be paid the following Pilotage Rates, according to the registered tonnage of the vessel:—

FOR LADEN VESSELS.

		Newport to Mouth of River Usk.			Newport to the Holmes or Cardiff Roads.		
		£	s.	d.	£	s.	d.
If under 100 tons	.....	0	10	0	..	0	13 0
100 tons and under 200	....	0	15	0	..	1	0 0
200	300	0	17	6	..	1	10 0
300	400	1	2	6	..	1	15 0
400	500	1	5	0	..	2	1 0
500	600	1	6	0	..	2	3 0
600	800	1	8	0	..	2	8 0
800	1000	1	10	0	..	2	12 0
1000 tons and upwards	.....	1	12	0	..	2	16 0

For all vessels actually engaged in the coasting trade of the United Kingdom, and vessels in ballast, the charges to be one-third less than the above.

FOR LADEN AND UNLADEN VESSELS.

		Limit No. 1.			Limit No. 2.			Limit No. 3.		
		£	s.	d.	£	s.	d.	£	s.	d.
If under 100 tons	....	1	0	6	1	10	6	1	18	0
100 tons and under 200		1	10	0	2	5	0	2	12	6
200	300	2	5	0	3	5	0	4	0	0
300	400	2	12	6	3	12	6	4	12	6
400	500	3	1	0	4	3	6	5	6	0
500	600	3	5	6	4	10	6	5	18	0
600	800	3	13	0	5	3	0	6	13	0
800	1000	4	2	0	5	17	0	7	17	0
1000 tons and upwards		4	11	0	6	11	0	8	16	0

LIMIT No. 1.—Between the Holmes or Cardiff Roads and Minehead or Kingroad, or any point east of Minehead and west of Kingroad.

LIMIT No. 2.—Between the Holmes or Cardiff Roads and Coombe, or any point west of Minehead or Nash Point, and east of Coombe.

LIMIT No. 3.—Between the Holmes or Cardiff Roads and Lundy Island, or any point west of Coombe.

Newport, continued.

Any Pilot who may be required to remain on board any ship or vessel for the convenience of the captain, owner, or agent, after he shall have discharged the duties for which he was engaged, shall be entitled to be paid ten shillings per day for every day he may be employed; and any Pilot who may be required to move any ship or vessel in the dock, harbour, or river, occupying only one tide, shall be entitled to be paid for every ship.

	s.	d.
Under 100 tons	4	0
100 and under 300	5	0
300 „ 500	7	6
500 „ 800	10	0
800 and upwards	12	6

Vessels wind-bound in the waters of the Newport District, and retaining the services of a Pilot, shall pay five shillings per diem.

Pilots taken on board of any vessel inward bound to the westward of Ilfracombe, shall be paid the same Pilotage rates as from Lundy Island; but if west of Nash Point or Minehead, and east of Ilfracombe, the same rates as from the Nash Point; if between the Nash Point and the Holmes, the same rates as from the Nash Point; and if between the Holmes and Kingroad, the same rates as from the Holmes.

In case any vessel shall be compelled to bear up and return from the westward from stress of weather or accident, the Pilot in charge shall be entitled to, and shall be paid one-third of the Pilotage charge in addition, according to the distance such ship or vessel may have reached before she shall have put back.

Every master, owner, or agent of any vessel employing a Pilot, shall, in addition to the foregoing charges, pay a clerk or collector's fee, as follows, viz:—

	s.	d.
Vessels under 100 tons	0	6
100 and under 300	1	0
300 „ 500	1	6
500 „ 800	2	0
800 and upwards	2	6

PENNARD.

Keelage, 4d. per ton register.

PORTHCAWL.**Tonnage Rates.**

Coastwise, 2d. per ton register. Foreign, 4d. per ton register.

Ballast.

To be charged on quantity delivered.

Porthcawl, continued.

Vessels under 100 tons register	6d. per ton.
100 tons and under 200	6½d. "
200 " 300	7d. "
300 " 400	8d. "
400 tons and upwards	9d. "

Depth of water on sills of half-tide basin:—Neaps, 16 feet; Springs, 27 feet. New Dock:—Neaps, 18 feet; Springs, 29 feet.

Vessels load afloat in half-tide basin as well as New Dock; wharf frontage of inner and outer basin, 3,200 feet. There are two coal tips in half-tide basin, and two completed in New Dock; also two in course of construction.

Steam Tug.

To or from the Scarweather or Nash Buoys, per nett register tonnage.

Under	20 tons	s.	d.	100 tons and under	120	£	s.	d.
20 tons and under 30	"	4	0	120	"	150	1	1 0
30	"	5	0	150	"	200	1	5 0
40	"	6	0	200	"	250	1	10 0
50	"	8	0	250	"	300	2	0 0
60	"	9	0	300	"	400	2	10 0
70	"	10	6	400	"	500	3	10 0
80	"	13	0	500	"	600	4	10 0
90	"	15	0	every additional 50 tons			0	5 0

Towage, from or to outside breakwater, a reduction of 1s. 3d.

To ascertain time of high water, and depth of water (in general) on sill of half-tide basin, add twelve minutes to high water time for Swansea, and two feet six inches to depth of water.

Pilotage.

From any place between Sker or Nash Points, and inside the sands, into the harbour, and out of the harbour, to every such place:—

Per registry under	30 tons	£	s.	d.
30 and under 40	"	0	4	0
40	"	0	5	0
50	"	0	6	6
60	"	0	8	0
75	"	0	10	0
100	"	0	12	0
125	"	0	15	0
150	"	0	18	0
175	"	1	2	0
200	"	1	5	0
225	"	1	10	0
225 tons and upwards		1	14	0
Steamers under 500 tons register		0	15	0
above 500 tons		1	0	0

Porthcawl, continued.

And for the use of the Pilot Boat, every ship using the same:—

	s.	d.
Per registry under 75 tons	1	0
75 tons and upwards	2	0

For transporting a ship in the harbour, and re-mooring her, or for mooring or unmooring a ship, 1s. 6d. for each Pilot, and 9d. for each hobbler.

And if any master of a ship shall engage a Pilot and hands to take his ship out of the harbour, and she is not ready to be taken out during that tide; or if, after having been moved for the purpose of being taken out, she does not proceed, 1s. 6d. for each Pilot, and 9d. for each hobbler or assistant.

PORT TALBOT.**Tonnage Rates.**

For every vessel laden..... 3d. per ton register.

For every vessel in ballast .. 2d. ,,

Pilotage.

	From Outer Buoy to destination, if in 1 tide of 3 hrs.			To Outer Buoy From berths, if in 1 tide of 3 hrs.		
	£	s.	d.	£	s.	d.
Above 25 tons register and under 40 ..	0	5	0	0	4	0
40 ..	0	6	0	0	5	0
50 ..	0	7	0	0	6	0
60 ..	0	8	0	0	6	10
70 ..	0	9	0	0	7	8
80 ..	0	10	0	0	8	6
90 ..	0	12	0	0	9	10
100 ..	0	14	0	0	11	6
120 ..	0	16	0	0	13	2
140 ..	0	18	0	0	14	10
160 ..	1	0	0	0	16	6
180 ..	1	5	0	1	0	0
200 ..	1	10	0	1	3	6
250 ..	2	0	0	1	10	4
300 ..	2	15	0	2	0	8
350 ..	3	10	0	2	11	4
400 ..	0	5	0	0	4	0

And for every additional 50 tons

If inside the outer buoy, only one-half of the foregoing rates.

For transporting a vessel from one part of the harbour to another: under 100 tons, 2s. 6d.; above 100 tons, 5s.

The price paid to hobbler not to exceed 2s. for each hobble; and no hobbler shall charge two hobbles unless occupied for more than three successive hours.

Port Talbot, continued.

For every hobbler engaged by the master, 1s. 6d. from sea into the dock, and 2s. from sea to the wharf of her destination; if required to tow, 6d. additional to each hobbler; if engaged only to the end of the breakwater, half the above rates only to be charged.

Steam Tugs.*To or from the Outer Buoy.*

Register Tonnage.	£	s.	d.	Register Tonnage.	£	s.	d.
20 tons and under	..	0	3	0	100 and under 120	..	0 17 0
20 and under 30	..	0	4	0	120	..	1 1 0
30	..	0	5	0	150	..	1 5 0
40	..	0	6	0	200	..	1 10 0
50	..	0	8	0	250	..	2 0 0
60	..	0	9	0	300	..	2 10 0
70	..	0	10	6	400	..	3 10 0
80	..	0	13	0	500	..	4 10 0
90	..	0	15	0	every additional 50 tons	0	5 0

Stemming Fee, 1s.

For use of Harbour Company's Tow Rope:—	s.	d.
Vessels under 50 tons register burthen.....	1	6
„ of 50 tons and under 100	2	0
„ 100 „ 200	3	0
„ 200 „ 300	4	0
„ 300 tons and upwards	5	0

Ballast.

Ballast, in the river, is free of charge; in the dock, 3d. per ton.

For use of planks and barrows, for 10 tons and under, 2s.; 10 tons and under 20, 3s. 6d.; and 1s. extra for every 10 tons additional.

For use of the Graving-bank:—on the hard, 1d. per ton register per week; on the blocks, 1½d. per ton register per week.

SAUNDERSFOOT.

Pilotage.—For every 100 tons in and out, 10s. (not compulsory.)

Harbour Dues.—2d. per ton register.

Pier Light and Signal.

Each Vessel.	s.	d.	Each Vessel.	s.	d.
20 to 30 tons register....	0	3	70 to 100 tons register..	1	0
30 to 50 „	0	6	100 to 150 „ ..	1	6
50 to 70 „	0	9	150 tons and upwards ..	2	0

Discharging Ballast.

For each man employed on board....	For quantity on board.
For wheeling	1d. per ton register.
	1d. „

Trimming.— 2d. per ton.

SWANSEA.**Tonnage Rates.**

For every vessel bound from and to any port or place in the United Kingdom, or the Isle of Man,	s.	d.
under 150 tons.....	per ton	0 4
150 tons and under 250 tons	per ton	0 5½
250 tons and under 350 tons	per ton	0 7
350 tons and upwards.....	per ton	0 8½
For every vessel bound to or from any port or place in Europe, or any port or place within the Straits of Gibraltar, under 100 tons	per ton	0 4
100 tons and under 250 tons	per ton	0 6
250 tons and under 350 tons	per ton	0 7½
350 tons and upwards.....	per ton	0 9
For every vessel bound to or from any other port or place than above specified, under 150 tons	per ton	0 7½
150 tons and under 250 tons	per ton	0 9½
250 tons and under 350 tons	per ton	1 0
350 tons and upwards.....	per ton	1 3

And in respect of Vessels entering in Ballast, and departing with Cargoes, the following Rates:—

Vessels bound to ports in the United Kingdom, or the Isle of Man	per ton	s.	d.
Vessels bound to any port in Europe, or within the Straits of Gibraltar, under 100 tons	per ton	0	3
100 tons and under 250 tons	per ton	0	5
250 tons and under 350 tons	per ton	0	6
350 tons and upwards	per ton	0	7
Vessels bound to any other ports, under 150 tons....	per ton	0	6
150 tons and under 250 tons	per ton	0	7
250 tons and under 350 tons	per ton	0	9
350 tons and upwards.....	per ton	0	11

And in respect of Vessels entering Swansea Harbour in Ballast, and leaving without Cargoes, viz. :—

For every vessel bound from and to any port or place in the United Kingdom, or the Isle of Man	per ton	s.	d.
For every vessel bound to or from any port or place in Europe, or any port or place within the Straits of Gibraltar, under 100 tons	per ton	0	2
100 tons and under 250 tons	per ton	0	3
250 tons and under 350 tons	per ton	0	4
350 tons and upwards	per ton	0	4½

Swansea, continued.

For every vessel bound to or from any other port or place than above specified, under 150 tons	per ton	s.	d.
150 tons and under 250 tons	per ton	0	4
250 tons and under 350 tons	per ton	0	5
350 tons and upwards	per ton	0	6
		0	7½

Vessels driven in by stress of weather, and remaining over four tides, half the above rates. Vessels remaining over thirty days, unless prevented by embargo or weather, 1d. per ton per week.

Ballast Rates.

Register Tonnage.	Rates per ton on the quantity discharged.			
	s.	d.	s.	d.
Under 100 tons	0	5	at New Cut ..	0 6 in Dock.
100 and under 150 tons	0	7	" ..	0 8 "
150 and under 200 tons	0	9	" ..	0 10 "
200 tons and upwards	0	11	" ..	1 0 "

Additional Charges.

	s.	d.
Discharged from any vessel into another vessel. . . .	0	9 per ton.
Discharged into Lighters	1	6 "
Loaded into any vessel.	0	6 "
Loaded into any vessel and discharged therefrom. .	1	6 ,

Towage.*In or Out, exclusive of Harbour Towsages.*

	£	s.	d.			£	s.	d.
Under 50 tons	0	7	6	425 and under 450		3	15	0
50 and under 75	0	10	0	450	"	4	0	0
75	0	12	6	475	"	5	0	0
100	0	15	0	500	"	5	10	0
125	0	17	6	525	"	5	15	0
150	1	0	0	550	"	5	0	0
175	1	5	0	575	"	6	0	0
200	1	10	0	600	"	6	10	0
225	1	15	0	650	"	7	0	0
250	2	0	0	700	"	7	5	0
275	2	5	0	750	"	8	0	0
300	2	10	0	800	"	8	10	0
325	2	15	0	850	"	9	0	0
350	3	0	0	900	"	9	5	0
375	3	5	0	950	"	10	0	0
400	4	0	0					

All vessels above 1000 tons, 2d. per ton, new measurement.
If more than one Tug is required, half the above rates will be charged for each additional Tug.

*Swansea, continued.***Craneage.***At Corporation Cranes, Public Quay.*

	s.	d.	
For every lift under 1 ton	0	3	per lift.
Not exceeding 2 tons	0	3	"
" 2 to 5 tons	0	6	"
Five tons and upwards	2	0	"

Charges for Use of Cranes,*Belonging to the Harbour Trustees.*

	£	s.	d.		£	s.	d.	
Under 1 ton ..	0	0	3	per lift.	5 and under 6 ..	0	7	6 per lift.
1 and under 2 ..	0	0	6	"	6 "	7	0	10 "
2 "	3	0	1	6 "	7 "	8	0	12 "
3 "	4	0	3	0 "	8 "	9	0	15 "
4 "	5	0	4	6 "	9 "	10	1	0 "

No lift to exceed ten tons.

Pilotage.

Register Tonnage.			Inwards.			Outwards.			Total.		
			£	s.	d.	£	s.	d.	£	s.	d.
Vessels	50 tons and under	75	0	10	0	0	6	0	0	16	0
Vessels	75 tons and under	100	0	11	0	0	7	0	0	18	0
Vessels	100 tons and under	125	0	12	0	0	8	0	1	0	0
Vessels	125 tons and under	150	0	14	0	0	8	0	1	2	0
Vessels	150 tons and under	175	0	17	0	0	8	0	1	5	0
Vessels	175 tons and under	200	0	19	0	0	8	0	1	7	0
Vessels	200 tons and under	250	1	6	0	0	10	0	1	16	0
Vessels	250 tons and under	300	1	12	0	0	12	0	2	4	0
Vessels	300 tons and under	350	2	3	0	0	14	6	2	17	6
Vessels	350 tons and under	400	2	10	0	0	17	0	3	7	0
Vessels	400 tons and under	450	2	17	6	1	2	0	3	19	6
Vessels	450 tons and under	500	3	5	0	1	7	0	4	12	0
Vessels	500 tons and under	550	3	10	0	1	12	0	5	2	0
Vessels	550 tons and under	600	3	15	0	1	17	0	5	12	0
Vessels	600 tons and under	650	4	0	0	2	2	0	6	2	0
Vessels	650 tons and under	700	4	5	0	2	7	0	6	12	0
Vessels	700 tons and under	750	4	10	0	2	12	0	7	2	0
Vessels	750 tons and under	800	4	15	0	2	17	0	7	12	0
Vessels	800 tons and under	850	5	0	0	3	2	0	8	2	0
Vessels	850 tons and under	900	5	5	0	3	7	0	8	12	0
Vessels	900 tons and under	950	5	10	0	3	12	0	9	2	0
Vessels	950 tons and under	1000	5	15	0	3	17	0	9	12	0

Together with an additional sum of 5s. in respect of every 50 tons above 950 tons on the Inward Pilotage; and an additional sum of 5s. in respect of every 50 tons above 950 tons on the Outward Pilotage.

Swansea, continued.

Pilots will take vessels over 500 tons register, Outward Bound, clear of the Green Grounds, or to the Mumbles Roads; and the above charge includes landing the Pilot, in all cases.

Vessels of 200 tons and upwards, if boarded beyond the following bearings, shall pay an additional Pilotage, as under:—

	W. of Pwllty Point, bearing N.N.E.	W. of Oxwich Point bearing N.N.E.S. of Sker Buoy, bearing N.N.E. or W.S.W.	W. of Worm's Head, bearing N.N.E.
	s. d.	s. d.	£ s. d.
200 tons and under 300 ..	4 0	5 0	0 6 0
300 tons and under 400 ..	5 6	7 6	0 10 0
400 tons and under 500 ..	7 6	10 0	0 15 0
500 tons and under 600 ..	10 0	12 6	1 0 0
600 tons and under 700 ..	12 6	15 0	1 5 0
700 tons and upwards ..	15 0	18 6	1 10 0

One-half of the above rates only to be paid and payable to every Pilot navigating or assisting any vessel (not entering Swansea Harbour) within any part of Swansea Bay, or within the limits of the Pilotage Ground hereinafter mentioned.

N.B.—Pilotage not compulsory upon vessels under 100 tons register, when entering or leaving Swansea Harbour in ballast; but if any Pilotage be required, only a licensed Pilot to be employed, and the above rates to be paid.

OPTIONAL PILOTAGE.—Masters of vessels under 500 tons register, requiring Pilots to take their vessels to the Mumbles Roads, or clear of the Green Grounds, to pay, in addition to the Outward Pilotage Rates, the following additional Rates, including landing:—

	s. d.
Vessels under 100 tons	4 0
Vessels 100 tons and under 200	5 6
Vessels 200 tons and under 300	7 6
Vessels 300 tons and under 400	9 6
Vessels 400 tons and under 500	11 0

Masters of vessels requiring Pilots to take their vessels to the Eastern or Western Limits, to pay, in addition to the Outward Rates, the following additional rates, including landing: £ s. d.

Vessels 300 tons and under 500	3 0 0
Vessels 500 tons and under 700	4 0 0
Vessels 700 tons and under 900	5 0 0
Vessels 900 tons and upwards	6 0 0

The following shall be deemed to be the limits of the Pilotage Ground of Pilots appointed and licensed by the Swansea Harbour Trustees, viz.:—"North of the line of the Nash Lights in one;" and "east of an imaginary line running north and south of a point, four miles westward of the Helwick light vessel, placed off the Helwick Shoal, near the Worm's Head, in the county of Glamorgan."

Swansea, continued.

Every Pilot required to remain on board a vessel, whether inward or outward bound, to be paid by the Master of such vessel, at the rate of 4s. for every twelve hours, or broken portion of twelve hours, in which such Pilot shall not have earned pilotage or distance-money in the same vessel.

Harbour Pilotage.

	s.	d.
Vessels under 10 tons.....	2	6
Vessels 100 tons and under 200.....	3	6
Vessels 200 tons and under 400.....	5	0
Vessels 400 tons and under 500.....	7	6
Vessels 500 tons and upwards	12	0

If the Master of any vessel shall require any Pilot to go on board and take his vessel out of the Harbour, transport or move her, and such vessel be not ready to be taken out or moved, half the rates last mentioned shall be paid to the Pilot.

Masters of vessels requiring hobbler or boats, to assist in removing vessels within the Harbour, shall pay each hobbler employed, 2s, and for each boat, 2s.

TENBY.**Tonnage Rates.**

Vessels discharging	3d. per ton register.
Vessels wind bound	1½d. „
Yachts	2d. „ or 6d. per ton yearly.
Trawlers	2d. „ or 40s. yearly.

Pilot Boats exempt.

WATCHET.

Harbour Dues.—One halfpenny per ton registered tonnage.

VALUE IN BRITISH CURRENCY OF THE MONEYS OF ALL NATIONS.

AMERICA, U.S.			£	s.	d.	BREMEN.			£	s.	d.
Eagle	2	1	0				Louis d'or	0	16	0	
Half Eagle	1	0	6				Gold Rigsbank Dollar	0	3	4	
Dollar	0	4	2				36 Gros Piece	0	4	2	
AUSTRIA.						BELGIUM.					
Ducat.....	0	9	4				Gold Leopold	0	19	10	
Silver Florin.....	0	2	0				— 10 Franc Piece	0	7	10	
Dollar.....	0	4	0				Silver 5 Franc.....	0	3	11	
Zwanzigr, 20 Kreutzers ...	0	0	8				— 1 Franc.....	0	0	9	

BRAZILS.

	£	s.	d.
Gold Piece, 6400 Reis	1	15	9
4000 —	1	0	0
Silver ditto, 1200 —	0	4	2
960 —	0	4	1
640 —	0	2	9
320 —	0	1	4
200 —	0	0	8

DENMARK.

Christian d'or	0	16	3
Silver Species	0	4	4
Rigsbank Daler	0	2	2
Mark	0	0	4½

EGYPT.

Gold New Sequin	0	10	4
Silver New Piastre	0	3	4
Grush	0	1	2

EAST INDIES.

Gold Mohur	1	9	0
Sicca Rupee	0	1	10½

FRANCE.

Gold Napoleon	0	16	0
Silver 5-Franc Piece	0	4	0
Franc	0	0	9½

GREECE.

40-Drachmi Gold Piece	1	10	6
Five ditto	0	3	9
1 Drachmi, 100 Leplas	0	0	8½

GERMANY.

Gold Louis d'or	0	16	1
Ducat	0	9	3
Silver Crown	0	4	4
Florin	0	1	8

HOLLAND.

Gold 10-Florin Piece	0	16	6
Ducat	0	9	3
Silver Florin or Guilder	0	1	8

HAMBURG and LUBEC.

Ducat	0	9	3
Dollar	0	4	4
Mark	0	1	2½

HANOVER, BRUNSWICK, &c.

Gold George d'or Double	1	12	4
Ditto, Single	0	16	2
Thaler, 30 Groschen	0	2	11

MEXICO.

Gold Doubloon	3	5	0
Half ditto	1	12	6
Quarter ditto	0	16	3
Sixteenth ditto	0	4	0
Silver Dollar	0	4	2
Half ditto	0	2	1
Quarter ditto	0	1	0½
Eighth ditto	0	0	6½

NAPLES.

	£	s.	d.
Gold Piece of 30 Ducats	5	0	0
Silver Ducat	0	3	4
Dollar	0	4	0

NORWAY.

Spanish Dollar	0	4	4
Rigsbank Dollar	0	2	2
Mark	0	0	9½

POLAND.

Gold Ducat	0	9	0
Rix Dollar	0	4	0
Florin	0	0	5½

PORTUGAL.

Gold Joanoze, 1000 Reis	1	16	0
Silver Crown, 100 Reis	0	4	8
Crusado 400 Reis	0	2	3

PRUSSIA.

Gold Frederick	0	16	9
Silver Thaler	0	3	0
Silbergroschen	0	0	1½

ROME.

Gold 10-Scudi Piece	2	2	6
Silver Scudo, 10 Paoli	0	4	2
Paoli, 10 Bajochi	0	0	5

RUSSIA.

Gold Half Imperial	0	16	3
Ducat	0	9	2
Silver Rouble	0	3	2

SAXONY.

August d'or	0	16	2
Thaler Specie	0	3	11
Currency	0	3	0

SPAIN.

Gold Doubloon	3	6	6
Pistole	0	16	6
Silver Dollar	0	4	3

SWEDEN.

Gold Ducat	0	9	2
Silver Species	0	4	4
Half Species	0	2	2
Rix Dollar Banco, 48 Sk.	0	1	8

SWITZERLAND.

Gold Double Pistole	1	17	0
Four-Franc Piece	0	4	8
1-Franc do., 10 Batzen	0	1	1½

TURKEY.

Gold New Double Sequin	1	16	0
Sequin	0	18	0
Spanish Dollar	0	4	2
Piastre, 40 Paras	0	0	2½

TIDAL CONSTANTS.

By the following Table, the time of High Water may be found in *Local Mean Time*, for any day of the year, by adding to or subtracting from the various Ports of reference.

GREAT BRITAIN.

West Coast, &c.				East Coast, &c.			
		H. M.				H. M.	
St. Ives	sub.	1 48	From Milford Haven.	Inverness	sub.	1 49	
Newquay	sub.	1 28		Aberdeen	sub.	1 7	
Padstow	sub.	1 19		Dundee	add	0 25	
Boscastle	sub.	1 17		Perth	add	1 28	
Budehaven.. ..	sub.	0 58		Leith	add	0 10	
Lundy Island ..	sub.	1 17		Berwick	add	0 11	
Barnstaple Bridge	add	0 41		Blyth	add	1 8	
Appledore	add	0 11		Tynemouth Bar ..	add	1 13	
Bideford	add	0 20		North Shields ..	add	1 16	
Minehead	sub.	1 12		Newcastle	add	2 16	To or from London.
Bridgewater Bar..	sub.	0 52	From Bristol.	Sunderland	add	1 15	
Weston-super-Mare	sub.	0 48		Seaham	add	1 17	
Flatholm Island..	sub.	0 48		Hartlepool	add	1 21	
Portishead	sub.	0 15		Whitby	add	1 38	
Kingroad	sub.	0 35		Scarborough	add	2 4	
Chepstow	sub.	0 1		Flamborough Head	add	2 23	
Carmarthen Bar..	sub.	0 22		Great Grimsby ..	add	3 29	
Tenby	sub.	0 32		Hull	add	4 19	
St. Ann's Lighthouse	sub.	0 36		Goole	add	5 37	
Fishguard	add	0 24	To or from Milford Haven.	Lynn	add	3 53	
Cardigan	add	0 29		Yarmouth Road..	sub.	4 52	
Newquay	add	0 53		Lowestoft	sub.	4 10	
Aberystwith ..	add	0 59		Orfordness	sub.	2 52	
Aberdovey	add	1 28		Margate	sub.	2 27	
Port Madoc	add	0 58		Nore	sub.	1 37	
Caernarvon.. ..	sub.	2 2		Chatham	sub.	1 5	
Holyhead	sub.	1 24		Gravesend	sub.	0 57	
Amlwch	sub.	1 5		Woolwich	sub.	0 30	
Beaumaris	sub.	1 3		London Docks ..	sub.	0 10	
Chester	sub.	1 5	To or from Liverpool.	South Coast.			
Fleetwood	sub.	0 23		Ramsgate	add	5 12	To Milford Haven.
Whitehaven	sub.	0 21		Deal	add	4 43	
Douglas, I. of Man	sub.	0 23		Folkestone	add	4 35	
Ramsey	sub.	0 23		Hastings	add	4 21	
Peel	sub.	0 27		Beachy Head	add	4 48	
Kircudbright ..	sub.	0 25		Shoreham	add	5 2	
Ardrossan	add	0 10					
Glasgow	add	1 50					

Tidal Constants, continued.

	H. M.	
Arundel Bar ..	add 5 3	
Littlehampton ..	add 5 4	To or from Milford Haven.
Chichester	add 4 58	
Bembridge Point	add 4 28	
Portsmouth	add 5 9	
Southampton ..	add 3 58	
West Cowes	add 4 13	
Yarmouth	add 3 28	
Needles Point ..	add 3 14	
Christchurch ..	add 2 28	
Poole	add 2 38	
Portland	add 0 29	
Bridport	sub. 0 27	

	H. M.	
Lyme Regis	sub. 0 11	
Exmouth	sub. 0 11	From Milford Haven.
Torbay	sub. 0 32	
Teignmouth	sub. 0 32	
Dartmouth	sub. 0 16	
Devonport	sub. 0 49	
Plymouth Break.	sub. 0 55	
Fowey	sub. 1 18	
Mevagizey	sub. 1 28	
Falmouth	sub. 1 35	
Lizard	sub. 1 32	
Penzance	sub. 2 2	
Scilly I. (St. Mary)	sub. 2 5	

IRELAND.

Skull	sub. 2 30	
Crookhaven	sub. 2 23	
Dunmanus Harb.	sub. 2 35	
Dunbeacon	sub. 2 41	
Black Ball Harb.	sub. 2 52	
Castletown	sub. 2 18	
Bantry Harbour ..	sub. 2 45	
West Cove	sub. 2 40	
Valentia Harbour.	sub. 2 50	To or from Milford Haven.
Kilbaba	sub. 2 16	
Kilrush	sub. 1 50	
Carrigaholt	sub. 1 48	
Tarbert	sub. 1 35	
Foyne's Island ..	sub. 0 57	
Mellon	sub. 0 31	
Limerick	sub. 0 16	
Galway	sub. 1 57	
Roundstone	sub. 2 4	
Achillbeg	sub. 1 18	
Broadhaven Harb.	sub. 1 32	
Westport	sub. 1 35	
Sligo Bay	sub. 1 14	
Donegal Harbour.	sub. 1 14	
Killibegs	sub. 1 16	
Lough Rossmore.	sub. 1 12	
Sheephaven	sub. 1 0	
Londonderry ..	add 1 29	
Coleraine	sub. 0 8	

Tor Point	sub. 1 55	
Lough Lorne	sub. 0 47	
Belfast	sub. 0 52	From Liverpool.
Donaghadee	sub. 0 22	
Lough Strangford.	sub. 0 42	
Warren Point	sub. 0 25	
Carlingford Bar ..	sub. 0 55	
Howth Harbour ..	sub. 0 26	
Dublin Bar	sub. 0 23	
Kingstown	sub. 0 25	
Wicklow	sub. 1 6	
Arklow	sub. 2 50	
Wexford	add 0 49	
New Ross	sub. 0 28	
Waterford (bridge)	sub. 0 26	To or from Milford Haven.
Do. (Duncan fort)	sub. 1 12	
Dunmore	sub. 1 5	
Ballinacourty, Dun-		
garven	sub. 1 20	
Youghal	sub. 1 18	
Ballycottin	sub. 1 38	
Cork	sub. 1 34	
Queenstown	sub. 1 31	
Kinsale	sub. 1 49	
Courtmaeskerry ..	sub. 1 56	
Castletownsend ..	sub. 2 11	
Baltimore	sub. 2 9	
Cape Clear	sub. 2 32	

Tidal Constants, continued.

FOREIGN AND COLONIAL.

	H. M.		H. M.
Adelaide, port, Aus. sub.	0 48	Ichabo sub.	5 32
Aden, Arabia .. add	3 13	Jackson, Port .. add	1 43
Auckland add	0 33	Jersey, St. Hellier sub.	4 7
Bayonne Bar. Fr. sub.	2 47	Malaga add	5 28
Bilboa, Spain .. sub.	3 32	Malo, St. sub.	0 27
Bombay add	5 8	Melbourne sub.	5 12
Bordeaux add	0 18	Moreton Bay .. add	2 28
Boston, U.S. .. add	4 55	Natal, Port .. sub.	2 2
Botany Bay .. add	1 43	Nelson, New Zea. add	3 18
Boulogne add	4 53	New York add	1 41
Brest sub.	2 45	Oporto sub.	4 2
Buenos Ayres .. add	5 28	Ostend add	5 53
Cadiz, Spain .. sub.	4 47	Pernambuco .. sub.	2 9
Calais add	5 17	Philadelphia .. sub.	5 14
Calcutta sub.	4 2	Philip, Port, ent. sub.	5 2
Callao Bay sub.	0 45	Portland, U.S. .. add	4 53
Canton River, ent. add	3 28	Quebec add	0 6
Charlestown, U.S. add	0 41	Richmond, U.S. sub.	2 4
Cherbourg add	1 17	Rio Janeiro .. sub.	3 32
Copiapo add	1 58	Rochelle sub.	3 1
Coquimbo add	2 36	Royal, Port .. add	4 28
Delaware, U.S. .. add	1 28	Rotterdam sub.	2 47
Dieppe add	4 34	Rouen sub.	4 4
Francisco, San .. add	4 2	Savannah, City .. add	1 41
Galle, Point de .. sub.	4 32	Senegal add	3 58
Gambia River .. add	1 38	Singapore add	3 13
Geelong sub.	3 42	Suez Bay sub.	4 32
Gibraltar sub.	4 12	Sydney, Australia add	2 6
Guernsey, St. Peter add	0 16	Table Bay sub.	3 52
Hamburg sub.	1 3	Tangier sub.	4 50
Hong Kong .. add	3 43	Ushant sub.	3 0
Horn, Cape .. sub.	2 22	Valparaiso add	3 0

To or from Milford Haven.

To or from Milford Haven.

MOON'S RISING AND SETTING.

At four days old it sets at, and shines till, about 10 at night.	16 at a quarter after.....	7
5 about 11	17 at half after	8
6 about 12	18 about 10	
7 at near 1 in the morning.	19 about 11	
14 at full it rises about 6 in the evening.	20 about 12	

THE
BRISTOL CHANNEL
ALMANACK
AND
TIDE TABLES;
TOGETHER WITH
PILOTAGE REGULATIONS,
PORT CHARGES,
ASTRONOMICAL TABLES,
&c., &c.,
FOR THE YEAR
1870.

ENTERED AT STATIONERS' HALL.

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NOTICE.

The Port Charges, and other information, have been collected with as much care as circumstances would permit, but should any errors or omissions be discovered, the Publishers will be glad to have them pointed out, that they may be corrected in future years; and any suggestions for the improvement of the work will also be gladly received, as it is their desire to make it in every respect as accurate and complete as possible.

The work comprises:—

Calendar and Astronomical Tables ...pages	4 to 15
Tide Tables	pages 18 to 65
Port Charges, &c. ....pages	66 to 103
Tidal Constants	pages 103 to 106

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.	Sideral Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S								Equation of Time.	DM. in Sec.
				Apparent Right Ascension.	Apparent Declination.			Diff. for 1 hour	Semi- diam- eter.‡				
		h m	m s	h m s	° ' "	' "	"	' "	' "	m s	s		
1	Sat	conjunc	1 11	18 47 36	23 0 13	S	12-55	16 18	3 51	145			
2	Sun	0 31-5	1 11	18 52 1	22 54 58		13-70	16 18	4 20	147			
3	Mon	1 25-9	1 10	18 56 25	22 49 16		14-84	16 18	4 47	148			
4	Tue	2 17-5	1 10	19 0 49	22 43 6		15-97	16 18	5 15	149			
5	Wed	3 5-9	1 10	19 5 13	22 36 30		17-09	16 18	5 42	149			
6	Thu	3 51-5	1 10	19 9 36	22 29 26		18-20	16 18	6 9	149			
7	Fri	4 34-8	1 10	19 13 59	22 21 56		19-31	16 18	6 35	149			
8	Sat	5 16-6	1 10	19 18 21	22 14 0		20-40	16 18	7 0	149			
9	Sun	5 57-9	1 10	19 22 42	22 5 38		21-49	16 18	7 25	149			
10	Mon	6 39-5	1 10	19 27 3	21 56 49		22-57	16 18	7 50	149			
11	Tue	7 22-4	1 10	19 31 24	21 47 35		23-63	16 18	8 14	149			
12	Wed	8 7-4	1 10	19 35 44	21 37 56		24-68	16 18	8 37	149			
13	Thu	8 55-1	1 10	19 40 3	21 27 51		25-72	16 18	9 0	149			
14	Fri	9 45-9	1 10	19 44 21	21 17 22		26-75	16 18	9 22	149			
15	Sat	10 39-8	1 10	19 48 39	21 6 28		27-76	16 18	9 43	149			
16	Sun	11 35-8	1 9	19 52 56	20 55 10		28-76	16 18	10 4	149			
17	Mon	12 32-7	1 9	19 57 13	20 43 28		29-75	16 18	10 24	149			
18	Tue	13 29-3	1 9	20 1 29	20 31 22		30-72	16 17	10 43	149			
19	Wed	14 24-5	1 9	20 5 44	20 18 54		31-68	16 17	11 1	149			
20	Thu	15 17-9	1 9	20 9 58	20 6 2		32-63	16 17	11 19	149			
21	Fri	16 9-9	1 9	20 14 11	19 52 48		33-56	16 17	11 36	149			
22	Sat	17 0-9	1 9	20 18 24	19 39 12		34-48	16 17	11 52	149			
23	Sun	17 51-8	1 9	20 22 36	19 25 13		35-39	16 17	12 8	149			
24	Mon	18 43-4	1 9	20 26 48	19 10 54		36-28	16 17	12 22	149			
25	Tue	19 36-3	1 9	20 30 58	18 56 13		37-15	16 17	12 36	149			
26	Wed	20 30-6	1 8	20 35 8	18 41 11		38-01	16 17	12 49	149			
27	Thu	21 25-9	1 8	20 39 17	18 25 49		38-85	16 16	13 2	149			
28	Fri	22 21-2	1 8	20 43 25	18 10 7		39-68	16 16	13 13	149			
29	Sat	23 15-6	1 8	20 47 32	17 54 5		40-48	16 16	13 24	149			
30	Sun	conjunc	1 8	20 51 39	17 37 44		41-27	16 16	13 34	149			
31	Mon	0 7-9	1 8	20 55 44	17 21 4		42-05	16 16	13 43	149			

* Mean Time may be found by subtracting 0s.19 from the *Sideral*.

‡ The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's		Sideral Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S							Equation of Time.	Diff. for 1 hour				
		Southings	or Meridian Passage.		Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter.‡									
1	Tue	h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s
2	Wed	0	57.5	1	8	20	59	49	17	4	6 S	42.81	16	16	13	52	0.329
3	Thu	1	44.4	1	8	21	3	53	16	46	50	43.55	16	16	13	59	0.294
4	Fri	2	28.9	1	8	21	7	57	16	29	17	44.27	16	15	14	6	0.260
5	Sat	3	11.5	1	7	21	11	59	16	11	26	44.97	16	15	14	12	0.225
6	Sun	3	53.1	1	7	21	16	1	15	53	18	45.66	16	15	14	17.	0.191
7	Mon	4	34.4	1	7	21	20	1	15	34	55	46.33	16	15	14	21	0.156
8	Tue	5	16.4	1	7	21	24	1	15	16	15	46.98	16	15	14	24	0.122
9	Wed	5	59.8	1	7	21	28	0	14	57	20	47.61	16	15	14	27	0.089
10	Thu	6	45.4	1	7	21	31	59	14	38	10	48.23	16	14	14	28	0.055
11	Fri	7	33.9	1	7	21	35	56	14	18	45	48.83	16	14	14	29	0.021
12	Sat	8	25.4	1	7	21	39	53	13	59	6	49.41	16	14	14	29	0.012
13	Sun	9	19.8	1	7	21	43	49	13	39	14	49.98	16	14	14	29	0.044
14	Mon	10	16.2	1	6	21	47	44	13	19	8	50.52	16	14	14	27	0.076
15	Tue	11	13.5	1	6	21	51	38	12	58	49	51.05	16	13	14	25	0.107
16	Wed	12	10.5	1	6	21	55	32	12	38	18	51.56	16	13	14	22	0.138
17	Thu	13	6.3	1	6	21	59	25	12	17	34	52.06	16	13	14	19	0.168
18	Fri	14	0.7	1	6	22	3	17	11	56	39	52.54	16	13	14	14	0.197
19	Sat	14	53.9	1	6	22	7	8	11	35	33	53.00	16	13	14	9	0.226
20	Sun	15	46.6	1	6	22	10	59	11	14	15	53.45	16	12	14	3	0.254
21	Mon	16	39.3	1	6	22	14	49	10	52	47	53.88	16	12	13	57	0.280
22	Tue	17	32.7	1	6	22	18	39	10	31	9	54.30	16	12	13	50	0.307
23	Wed	18	26.9	1	5	22	22	28	10	9	21	54.70	16	12	13	42	0.332
24	Thu	19	21.7	1	5	22	26	16	9	47	23	55.08	16	11	13	34	0.357
25	Fri	20	16.5	1	5	22	30	4	9	25	17	55.44	16	11	13	25	0.381
26	Sat	21	10.4	1	5	22	33	51	9	3	2	55.79	16	11	13	16	0.405
27	Sun	22	2.5	1	5	22	37	37	8	40	39	56.12	16	11	13	6	0.428
28	Mon	22	52.3	1	5	22	41	23	8	18	8	56.43	16	11	12	55	0.451
29	Tue	23	39.6	1	5	22	45	9	7	55	30	56.73	16	10	12	44	0.473

* Mean Time may be found by subtracting 0s.18 from the *Sidereal*.‡ The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.	Sideral Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S								Equation of Time.	Diff. for 1 hour
				Apparent Right Ascension.			Apparent Declination.			Diff. for 1 hour	Semi- diam- eter.†		
		h m	m s	h m s	° ' "	° ' "	° ' "	' "	' "	m s	s		
1	Tue	conjunc	1	5 22 48 54	7 32 45 S	57° 01'	16 10	12 32	0-494				
2	Wed	0 24·6	1	5 22 52 38	7 9 53	57° 27'	16 10	12 20	0-515				
3	Thu	1 7·7	1	5 22 56 22	6 46 56	57° 51'	16 10	12 8	0-535				
4	Fri	1 49·6	1	5 23 0 6	6 23 52	57° 74'	16 9	11 55	0-555				
5	Sat	2 31·0	1	5 23 3 49	6 0 44	57° 95'	16 9	11 41	0-573				
6	Sun	3 12·5	1	5 23 7 31	5 37 30	58° 15'	16 9	11 27	0-591				
7	Mon	3 55·1	1	5 23 11 13	5 14 12	58° 33'	16 9	11 13	0-609				
8	Tue	4 39·3	1	4 23 14 55	4 50 50	58° 49'	16 8	10 58	0-625				
9	Wed	5 25·7	1	4 23 18 36	4 27 24	58° 64'	16 8	10 43	0-641				
10	Thu	6 14·8	1	4 23 22 17	4 3 55	58° 76'	16 8	10 27	0-656				
11	Fri	7 6·5	1	4 23 25 58	3 40 23	58° 87'	16 8	10 11	0-669				
12	Sat	8 0·6	1	4 23 29 38	3 16 48	58° 97'	16 7	9 55	0-683				
13	Sun	8 56·3	1	4 23 33 18	2 53 12	59° 05'	16 7	9 38	0-696				
14	Mon	9 52·6	1	4 23 36 58	2 29 33	59° 12'	16 7	9 22	0-708				
15	Tue	10 48·8	1	4 23 40 37	2 5 53	59° 17'	16 6	9 4	0-719				
16	Wed	11 44·3	1	4 23 44 17	1 42 12	59° 21'	16 6	8 47	0-728				
17	Thu	12 39·2	1	4 23 47 56	1 18 31	59° 23'	16 6	8 30	0-736				
18	Fri	13 33·7	1	4 23 51 34	0 54 49	59° 24'	16 6	8 12	0-744				
19	Sat	14 28·4	1	4 23 55 13	0 31 7	59° 23'	16 5	7 54	0-750				
20	Sun	15 23·7	1	4 23 58 51	0 7 25	59° 21'	16 5	7 36	0-756				
21	Mon	16 19·6	1	4 0 2 30	0 16 15 N	59° 18'	16 5	7 18	0-760				
22	Tue	17 16·0	1	4 0 6 8	0 39 55	59° 13'	16 5	6 59	0-763				
23	Wed	18 12·1	1	4 0 9 46	1 3 34	59° 07'	16 4	6 41	0-765				
24	Thu	19 6·9	1	4 0 13 24	1 27 11	58° 99'	16 4	6 23	0-767				
25	Fri	19 59·7	1	4 0 17 3	1 50 46	58° 90'	16 4	6 4	0-768				
26	Sat	20 50·0	1	4 0 20 41	2 14 19	58° 79'	16 3	5 46	0-768				
27	Sun	21 37·6	1	4 0 24 19	2 37 49	58° 67'	16 3	5 27	0-768				
28	Mon	22 22·7	1	4 0 27 57	3 1 16	58° 54'	16 3	5 9	0-766				
29	Tue	23 6·0	1	4 0 31 35	3 24 39	58° 39'	16 3	4 50	0-764				
30	Wed	23 47·9	1	4 0 35 13	3 47 59	58° 22'	16 2	4 32	0-761				
31	Thu	conjunc	1	4 0 38 52	4 11 14	58° 04'	16 2	4 14	0-758				

Subtract from Mean Time.

* Mean Time may be found by subtracting 0^m 18^s from the *Sidereal*.
 † The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's		Sideral Time of the Sun's Semidi- ameter passing the Meridian.*	THE SUN'S							Equation of Time.	Diff. for 1 hour				
		Southings	or Meridian Passage.		Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi-diameter. †									
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s
1	Fri	0	29.2	1	4	0	42	30	4	34	25 N	57.84	16	2	3	56	0.754
2	Sat	1	10.6	1	4	0	46	9	4	57	31	57.63	16	1	3	38	0.749
3	Sun	1	52.7	1	4	0	49	47	5	20	32	57.40	16	1	3	20	0.744
4	Mon	2	36.2	1	4	0	53	26	5	43	27	57.15	16	1	3	2	0.737
5	Tue	3	21.6	1	4	0	57	5	6	6	16	56.90	16	1	2	44	0.730
6	Wed	4	9.2	1	4	1	0	44	6	28	59	56.63	16	0	2	27	0.723
7	Thu	4	59.1	1	4	1	4	23	6	51	34	56.34	16	0	2	10	0.715
8	Fri	5	51.1	1	4	1	8	3	7	14	3	56.04	16	0	1	53	0.706
9	Sat	6	44.5	1	4	1	11	43	7	36	25	55.72	16	0	1	36	0.696
10	Sun	7	38.8	1	4	1	15	23	7	58	38	55.39	15	59	1	19	0.686
11	Mon	8	33.3	1	4	1	19	3	8	20	44	55.04	15	59	1	3	0.675
12	Tue	9	27.6	1	4	1	22	43	8	42	41	54.68	15	59	0	47	0.663
13	Wed	10	21.8	1	4	1	26	24	9	4	29	54.31	15	59	0	31	0.651
14	Thu	11	16.1	1	4	1	30	5	9	26	8	53.92	15	58	0	16	0.638
15	Fri	12	11.1	1	4	1	33	47	9	47	38	53.52	15	58	0	0	0.624
16	Sat	13	7.2	1	5	1	37	28	10	8	58	53.11	15	58	0	14	0.608
17	Sun	14	4.7	1	5	1	41	10	10	30	8	52.69	15	57	0	29	0.592
18	Mon	15	3.2	1	5	1	44	53	10	51	7	52.25	15	57	0	43	0.575
19	Tue	16	1.9	1	5	1	48	36	11	11	56	51.80	15	57	0	56	0.557
20	Wed	16	59.4	1	5	1	52	19	11	32	34	51.34	15	57	1	10	0.540
21	Thu	17	54.6	1	5	1	56	3	11	53	1	50.86	15	56	1	22	0.521
22	Fri	18	46.8	1	5	1	59	47	12	13	16	50.38	15	56	1	35	0.502
23	Sat	19	35.7	1	5	2	3	32	12	33	19	49.88	15	56	1	46	0.482
24	Sun	20	21.7	1	5	2	7	17	12	53	10	49.36	15	56	1	58	0.461
25	Mon	21	5.4	1	5	2	11	3	13	12	49	48.83	15	55	2	8	0.441
26	Tue	21	47.4	1	5	2	14	49	13	32	14	48.28	15	55	2	19	0.420
27	Wed	22	28.6	1	5	2	18	36	13	51	26	47.72	15	55	2	29	0.399
28	Thu	23	9.7	1	5	2	22	23	14	10	25	47.15	15	55	2	38	0.377
29	Fri	23	51.5	1	5	2	26	11	14	29	10	46.56	15	54	2	47	0.355
30	Sat	conjunc		1	5	2	29	59	14	47	40	45.96	15	54	2	55	0.333

* Mean Time may be found by subtracting 0^m.18 from the *Sidereal*.

† The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southing or Meridian Passage.	Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S						Equation of Time.	Diff. for 1 hour
				Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter.‡				
1	Sun	h m	m s	h m s	° ' "	"	"	m s	s	Add to Mean Time.	
2	Mon	0 34.6	1 6	2 33 48	15 5 56 N	45.35	15.54	3 3	0.311		
3	Tue	1 19.5	1 6	2 37 38	15 23 57	44.72	15.54	3 10	0.253		
4	Wed	2 6.5	1 6	2 41 27	15 41 43	44.08	15.53	3 17	0.206		
5	Thu	2 55.7	1 6	2 45 18	15 59 13	43.42	15.53	3 23	0.162		
6	Fri	3 46.7	1 6	2 49 9	16 16 27	42.75	15.53	3 28	0.120		
7	Sat	4 39.0	1 6	2 53 0	16 33 25	42.07	15.53	3 33	0.079		
8	Sun	5 31.9	1 6	2 56 53	16 50 6	41.38	15.53	3 38	0.039		
9	Mon	6 24.8	1 6	3 0 45	17 6 31	40.67	15.52	3 42	0.000		
10	Tue	7 17.2	1 6	3 4 38	17 22 38	39.94	15.52	3 45	0.129		
11	Wed	8 9.4	1 6	3 8 32	17 38 28	39.21	15.52	3 48	0.106		
12	Thu	9 1.7	1 6	3 12 26	17 54 0	38.46	15.52	3 50	0.083		
13	Fri	9 54.7	1 6	3 16 21	18 9 14	37.70	15.52	3 52	0.060		
14	Sat	10 49.3	1 7	3 20 17	18 24 10	36.94	15.51	3 53	0.036		
15	Sun	11 45.8	1 7	3 24 13	18 38 47	36.16	15.51	3 53	0.012		
16	Mon	12 44.5	1 7	3 28 9	18 53 5	35.36	15.51	3 53	0.012	Add to Mean Time.	
17	Tue	13 44.5	1 7	3 32 6	19 7 4	34.56	15.51	3 53	0.036		
18	Wed	14 44.6	1 7	3 36 4	19 20 44	33.75	15.51	3 52	0.059		
19	Thu	15 43.1	1 7	3 40 2	19 34 4	32.93	15.50	3 50	0.083		
20	Fri	16 38.5	1 7	3 44 1	19 47 5	32.10	15.50	3 48	0.107		
21	Sat	17 30.2	1 7	3 48 1	19 59 45	31.26	15.50	3 45	0.131		
22	Sun	18 18.3	1 7	3 52 1	20 12 5	30.40	15.50	3 41	0.154		
23	Mon	19 3.3	1 7	3 56 1	20 24 4	29.54	15.50	3 37	0.177		
24	Tue	19 46.1	1 7	4 0 2	20 35 43	28.67	15.49	3 33	0.200		
25	Wed	20 27.6	1 7	4 4 4	20 47 0	27.78	15.49	3 28	0.222		
26	Thu	21 8.6	1 7	4 8 6	20 57 56	26.89	15.49	3 22	0.243		
27	Fri	21 50.0	1 8	4 12 9	21 8 31	25.99	15.49	3 16	0.264		
28	Sat	22 32.5	1 8	4 16 12	21 18 43	25.07	15.49	3 10	0.285		
29	Sun	23 16.9	1 8	4 20 15	21 28 34	24.15	15.49	3 3	0.305		
30	Mon	conjunc	1 8	4 24 19	21 38 2	23.22	15.49	2 55	0.324		
31	Tue	0 3.5	1 8	4 28 24	21 47 8	22.28	15.48	2 47	0.342		
		0 52.4	1 8	4 32 29	21 55 51	21.33	15.48	2 39	0.360		

Mean Time may be found by subtracting 0s.18 from the *Sidercal*.
 † The Semidiameter for *Apparent Noon* may be assumed the same
 as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's		Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S							Equation of Time.	Diff. for 1 hour				
		Southing or Meridian Passage.			Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi-diam-eter.‡									
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s
1	Wed	1	43.4	1	8	4	36	34	22	4	12	N	20.37	15 48	2	30	0.377
2	Thu	2	35.8	1	8	4	40	40	22	12	9		19.41	15 48	2	20	0.393
3	Fri	3	28.7	1	8	4	44	46	22	19	43		18.44	15 48	2	11	0.409
4	Sat	4	21.2	1	8	4	48	53	22	26	54		17.46	15 48	2	1	0.423
5	Sun	5	13.0	1	8	4	53	0	22	33	41		16.47	15 48	1	51	0.436
6	Mon	6	3.9	1	8	4	57	7	22	40	4		15.48	15 47	1	40	0.448
7	Tue	6	54.4	1	8	5	1	14	22	46	4		14.48	15 47	1	29	0.460
8	Wed	7	45.1	1	8	5	5	22	22	51	39		13.48	15 47	1	18	0.471
9	Thu	8	36.9	1	8	5	9	30	22	56	50		12.47	15 47	1	6	0.481
10	Fri	9	30.7	1	8	5	13	38	23	1	38		11.46	15 47	0	55	0.490
11	Sat	10	27.0	1	8	5	17	47	23	6	0		10.45	15 47	0	43	0.499
12	Sun	11	25.8	1	8	5	21	55	23	9	59		9.43	15 47	0	31	0.507
13	Mon	12	26.1	1	8	5	26	4	23	13	33		8.40	15 47	0	19	0.514
14	Tue	13	26.3	1	8	5	30	13	23	16	42		7.38	15 47	0	6	0.521
15	Wed	14	24.5	1	8	5	34	22	23	19	27		6.36	15 47	0	6	0.526
16	Thu	15	19.4	1	8	5	38	32	23	21	47		5.33	15 47	0	19	0.531
17	Fri	16	10.5	1	8	5	42	41	23	23	42		4.30	15 46	0	32	0.535
18	Sat	16	57.8	1	8	5	46	50	23	25	13		3.27	15 46	0	45	0.538
19	Sun	17	42.3	1	8	5	51	0	23	26	19		2.24	15 46	0	58	0.540
20	Mon	18	24.7	1	8	5	55	10	23	27	0		1.20	15 46	1	11	0.542
21	Tue	19	6.0	1	8	5	59	19	23	27	17		0.17	15 46	1	24	0.543
22	Wed	19	47.2	1	8	6	3	29	23	27	9		0.86	15 46	1	37	0.542
23	Thu	20	29.2	1	8	6	7	38	23	26	35		1.90	15 46	1	50	0.540
24	Fri	21	12.8	1	8	6	11	48	23	25	37		2.93	15 46	2	3	0.537
25	Sat	21	58.5	1	8	6	15	57	23	24	15		3.96	15 46	2	16	0.534
26	Sun	22	46.9	1	8	6	20	6	23	22	27		4.99	15 46	2	28	0.529
27	Mon	23	37.7	1	8	6	24	16	23	20	15		6.02	15 46	2	41	0.523
28	Tue	conjunc		1	8	6	28	25	23	17	39		7.04	15 46	2	53	0.516
29	Wed	0	30.4	1	8	6	32	33	23	14	38		8.06	15 46	3	6	0.507
30	Thu	1	24.0	1	8	6	36	42	23	11	12		9.08	15 46	3	18	0.498

* Mean Time may be found by subtracting 0.19 from the *Sidereal*.† The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's		Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S						Equation of Time.	Diff for 1 hr.					
		Southing	or Meridian Passage		Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter.†									
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s
1	Fri	2	17.6	1	8	6	40	50	23	7	22 N	10.09	15	46	3	30	0.488
2	Sat	3	10.2	1	8	6	44	59	23	3	8	11.10	15	46	3	41	0.476
3	Sun	4	1.6	1	8	6	49	6	22	58	30	12.10	15	46	3	52	0.464
4	Mon	4	51.9	1	8	6	53	14	22	53	27	13.10	15	46	4	3	0.450
5	Tue	5	41.6	1	8	6	57	21	22	48	1	14.10	15	46	4	14	0.435
6	Wed	6	31.7	1	8	7	1	28	22	42	11	15.09	15	46	4	24	0.420
7	Thu	7	23.1	1	8	7	5	34	22	35	57	16.07	15	46	4	34	0.404
8	Fri	8	16.5	1	8	7	9	40	22	29	20	17.05	15	46	4	44	0.388
9	Sat	9	12.5	1	8	7	13	46	22	22	19	18.01	15	46	4	53	0.370
10	Sun	10	10.7	1	8	7	17	51	22	14	55	18.97	15	46	5	1	0.352
11	Mon	11	10.1	1	8	7	21	56	22	7	9	19.92	15	46	5	10	0.334
12	Tue	12	9.1	1	8	7	26	1	21	58	59	20.87	15	46	5	17	0.315
13	Wed	13	5.8	1	8	7	30	4	21	50	27	21.81	15	46	5	25	0.295
14	Thu	13	59.2	1	8	7	34	8	21	41	32	22.74	15	46	5	32	0.276
15	Fri	14	49.0	1	8	7	38	11	21	32	16	23.66	15	46	5	38	0.255
16	Sat	15	35.5	1	7	7	42	13	21	22	37	24.57	15	46	5	44	0.235
17	Sun	16	19.3	1	7	7	46	15	21	12	36	25.48	15	46	5	49	0.214
18	Mon	17	1.5	1	7	7	50	17	21	2	14	26.37	15	46	5	54	0.193
19	Tue	17	43.0	1	7	7	54	17	20	51	31	27.26	15	47	5	59	0.172
20	Wed	18	24.6	1	7	7	58	18	20	40	26	28.14	15	47	6	2	0.149
21	Thu	19	7.4	1	7	8	2	18	20	29	1	29.00	15	47	6	6	0.126
22	Fri	19	52.0	1	7	8	6	17	20	17	14	29.86	15	47	6	8	0.104
23	Sat	20	39.1	1	7	8	10	16	20	5	7	30.71	15	47	6	11	0.080
24	Sun	21	28.9	1	7	8	14	14	19	52	41	31.54	15	47	6	12	0.057
25	Mon	22	21.1	1	7	8	18	12	19	39	54	32.36	15	47	6	13	0.033
26	Tue	23	15.0	1	7	8	22	9	19	26	47	33.18	15	47	6	14	0.009
27	Wed	conjunc		1	7	8	26	5	19	13	22	33.98	15	47	6	14	0.016
28	Thu	0	9.6	1	6	8	30	1	18	59	37	34.77	15	47	6	13	0.041
29	Fri	1	3.7	1	6	8	33	56	18	45	33	35.54	15	47	6	12	0.066
30	Sat	1	56.7	1	6	8	37	51	18	31	11	36.31	15	48	6	10	0.092
31	Sun	2	48.4	1	6	8	41	45	18	16	30	37.07	15	48	6	7	0.115

* Mean Time may be found by subtracting 0^h 19 from the *Sideral*.
 † The Semidiameter for *Apparent Noon* may be assumed the same
 as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's		Sideral Time of the Sun's Semidi- ameter passing the Meridian.*	THE SUN'S						Equation of Time.	Diff. for 1 hour					
		Southing or Meridian Passage.			Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi-diameter.‡									
		h	m	m	s	h	m	s	°	'	"	°	'	"	m	s	s
1	Mon	3	39-0	1	6	8	45	38	18	1	31	N	37-81	15-48	6	4	0-144
2	Tue	4	29-2	1	6	8	49	31	17	46	15		38-54	15-48	6	1	0-169
3	Wed	5	20-0	1	6	8	53	23	17	30	42		39-25	15-48	5	56	0-195
4	Thu	6	12-1	1	6	8	57	15	17	14	51		39-96	15-48	5	51	0-221
5	Fri	7	6-1	1	6	9	1	6	16	58	44		40-65	15-48	5	46	0-247
6	Sat	8	2-2	1	6	9	4	56	16	42	20		41-33	15-49	5	39	0-272
7	Sun	8	59 7	1	6	9	8	46	16	25	40		41-99	15-49	5	33	0-297
8	Mon	9	57-6	1	6	9	12	35	16	8	44		42-64	15-49	5	25	0-322
9	Tue	10	54-3	1	5	9	16	24	15	51	33		43-29	15-49	5	17	0-347
10	Wed	11	48-6	1	5	9	20	12	15	34	7		43-91	15-49	5	8	0-371
11	Thu	12	39-7	1	5	9	23	59	15	16	25		44-53	15-49	4	59	0-395
12	Fri	13	27-6	1	5	9	27	46	14	58	29		45 13	15-49	4	49	0-419
13	Sat	14	12-8	1	5	9	31	32	14	40	19		45-72	15-50	4	39	0-441
14	Sun	14	56-0	1	5	9	35	18	14	21	54		46-30	15-50	4	28	0-463
15	Mon	15	38-0	1	5	9	39	3	14	3	16		46-87	15-50	4	17	0-485
16	Tue	16	19-6	1	5	9	42	47	13	44	24		47-42	15-50	4	5	0-507
17	Wed	17	1 9	1	5	9	46	32	13	25	19		47-97	15-50	3	53	0-527
18	Thu	17	45-5	1	5	9	50	15	13	6	2		48-50	15-51	3	40	0-547
19	Fri	18	31-1	1	5	9	53	58	12	46	31		49-01	15-51	3	26	0-567
20	Sat	19	19-2	1	5	9	57	41	12	26	49		49-52	15-51	3	12	0-586
21	Sun	20	9-8	1	5	10	1	23	12	6	54		50-01	15-51	2	58	0-605
22	Mon	21	2-7	1	4	10	5	5	11	46	48		50-48	15-51	2	43	0-623
23	Tue	21	57-0	1	4	10	8	47	11	26	31		50-95	15-52	2	28	0-641
24	Wed	22	51-8	1	4	10	12	28	11	6	2		51-40	15-52	2	13	0-658
25	Thu	23	46-1	1	4	10	16	8	10	45	23		51-83	15-52	1	57	0-675
26	Fri	conjunc		1	4	10	19	48	10	24	34		52 25	15-52	1	40	0-692
27	Sat	0 39 5		1	4	10	23	28	10	3	35		52-66	15-52	1	23	0-709
28	Sun	1 31-9		1	4	10	27	7	9	42	26		53-05	15-53	1	6	0-724
29	Mon	2 23-6		1	4	10	30	46	9	21	8		53-43	15-53	0	49	0-739
30	Tue	3 15-5		1	4	10	34	25	8	59	41		53-80	15-53	0	31	0-754
31	Wed	4 8-1		1	4	10	38	3	8	38	5		54-15	15-53	0	12	0-768

* Mean Time may be found by subtracting 0s.18 from the Sidereal.

† The Semidiameter for Apparent Noon may be assumed the same as that for Mean Noon.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's		Sider ^l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S								Equation of Time.	Diff. for 1 hour
		South- ing	or Meridian Passage.		Apparent Right Ascension.	Apparent Declination.			Diff. for 1 hour	Semi- diam- eter. §				
		h	m	m s	h m s	°	'	"	"	'	"	m s	s	
1	Thu	5	2.2	1 4	10 41 41	8	16	21 N	54.49	15	54	0 6	0.781	
2	Fri	5	57.8	1 4	10 45 19	7	54	29	54.81	15	54	0 25	0.794	
3	Sat	6	54.6	1 4	10 48 56	7	32	29	55.12	15	54	0 44	0.806	
4	Sun	7	51.6	1 4	10 52 33	7	10	23	55.41	15	54	1 4	0.817	
5	Mon	8	47.8	1 4	10 56 10	6	48	9	55.69	15	54	1 23	0.827	
6	Tue	9	42.0	1 4	10 59 47	6	25	49	55.96	15	55	1 43	0.837	
7	Wed	10	33.3	1 4	11 3 23	6	3	22	56.22	15	55	2 4	0.846	
8	Thu	11	21.7	1 4	11 6 59	5	40	50	56.46	15	55	2 24	0.854	
9	Fri	12	7.5	1 4	11 10 35	5	18	12	56.69	15	55	2 45	0.861	
10	Sat	12	51.2	1 4	11 14 11	4	55	28	56.90	15	56	3 5	0.866	
11	Sun	13	33.5	1 4	11 17 47	4	32	40	57.11	15	56	3 26	0.871	
12	Mon	14	15.3	1 4	11 21 22	4	9	46	57.30	15	56	3 47	0.876	
13	Tue	14	57.3	1 4	11 24 58	3	46	49	57.48	15	56	4 8	0.879	
14	Wed	15	40.2	1 4	11 28 33	3	23	47	57.64	15	57	4 29	0.881	
15	Thu	16	24.7	1 4	11 32 8	3	0	41	57.79	15	57	4 51	0.882	
16	Fri	17	11.3	1 4	11 35 44	2	37	32	57.93	15	57	5 12	0.883	
17	Sat	18	0.1	1 4	11 39 19	2	14	20	58.06	15	58	5 33	0.882	
18	Sun	18	51.1	1 4	11 42 55	1	51	4	58.17	15	58	5 54	0.881	
19	Mon	19	43.8	1 4	11 46 30	1	27	47	58.27	15	58	6 15	0.878	
20	Tue	20	37.6	1 4	11 50 6	1	4	27	58.35	15	58	6 36	0.875	
21	Wed	21	31.6	1 4	11 53 41	0	41	5	58.42	15	59	6 57	0.872	
22	Thu	22	25.3	1 4	11 57 17	0	17	42 N	58.48	15	59	7 18	0.868	
23	Fri	23	18.5	1 4	12 0 53	0	5	41 S	58.52	15	59	7 39	0.863	
24	Sat	con- junct		1 4	12 4 29	0	29	6	58.54	15	59	8 0	0.856	
25	Sun	0	11.5	1 4	12 8 5	0	52	52	58.55	16	0	8 20	0.850	
26	Mon	1	4.7	1 4	12 11 41	1	15	57	58.54	16	0	8 40	0.843	
27	Tue	1	58.7	1 4	12 15 17	1	39	23	58.52	16	0	9 0	0.835	
28	Wed	2	54.1	1 4	12 18 54	2	2	47	58.49	16	0	9 20	0.826	
29	Thu	3	51.0	1 4	12 22 31	2	26	11	58.43	16	1	9 40	0.816	
30	Fri	4	48.9	1 4	12 26 8	2	49	33	58.36	16	1	10 0	0.806	

Add to Mean Time.

Mean Time may be found by subtracting 0^s.18 from the *Siderous*.§ The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's Southings or Meridian Passage.		Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S								Equation of Time.	Diff. for 1 hour			
					Apparent Right Ascension.			Apparent Declination.			Diff. for 1 hour	Semi- diam- eter.‡					
1	Sat	h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s
1	Sat	5	47.0	1	4	12	29	45	3	12	53 S	58.28	16	1	10	19	0.795
2	Sun	6	44.0	1	4	12	33	23	3	36	11	58.18	16	2	10	38	0.783
3	Mon	7	38.6	1	4	12	37	1	3	59	26	58.07	16	2	10	56	0.771
4	Tue	8	30.3	1	4	12	40	39	4	22	38	57.94	16	2	11	15	0.758
5	Wed	9	19.0	1	4	12	44	17	4	45	48	57.79	16	2	11	33	0.743
6	Thu	10	4.9	1	4	12	47	56	5	8	53	57.64	16	3	11	50	0.728
7	Fri	10	48.6	1	4	12	51	35	5	31	55	57.47	16	3	12	8	0.712
8	Sat	11	31.0	1	4	12	55	15	5	54	52	57.28	16	3	12	25	0.694
9	Sun	12	12.7	1	4	12	58	55	6	17	45	57.07	16	4	12	41	0.676
10	Mon	12	54.4	1	4	13	2	36	6	40	32	56.86	16	4	12	57	0.657
11	Tue	13	36.9	1	4	13	6	17	7	3	14	56.63	16	4	13	13	0.636
12	Wed	14	20.8	1	5	13	9	58	7	25	51	56.39	16	4	13	28	0.616
13	Thu	15	6.4	1	5	13	13	40	7	48	21	56.13	16	5	13	42	0.594
14	Fri	15	54.0	1	5	13	17	23	8	10	45	55.85	16	5	13	56	0.571
15	Sat	16	43.4	1	5	13	21	6	8	33	3	55.56	16	5	14	10	0.547
16	Sun	17	34.5	1	5	13	24	50	8	55	13	55.26	16	5	14	22	0.523
17	Mon	18	26.5	1	5	13	28	34	9	17	15	54.94	16	6	14	35	0.498
18	Tue	19	18.9	1	5	13	32	19	9	39	10	54.60	16	6	14	46	0.472
19	Wed	20	11.2	1	5	13	36	5	10	0	56	54.25	16	6	14	57	0.445
20	Thu	21	3.3	1	5	13	39	51	10	22	34	53.88	16	7	15	8	0.418
21	Fri	21	55.6	1	5	13	43	38	10	44	2	53.49	16	7	15	17	0.390
22	Sat	22	48.3	1	5	13	47	25	11	5	21	53.09	16	7	15	26	0.362
23	Sun	23	42.4	1	5	13	51	13	11	26	30	52.67	16	7	15	35	0.333
24	Mon	conjunc		1	6	13	55	2	11	47	29	52.23	16	8	15	42	0.304
25	Tue	0	38.3	1	6	13	58	52	12	8	17	51.77	16	8	15	49	0.274
26	Wed	1	36.4	1	6	14	2	42	12	28	54	51.30	16	8	15	55	0.244
27	Thu	2	36.3	1	6	14	6	33	12	49	19	50.81	16	8	16	1	0.214
28	Fri	3	36.9	1	6	14	10	25	13	9	33	50.30	16	9	16	6	0.183
29	Sat	4	36.5	1	6	14	14	18	13	29	34	49.77	16	9	16	10	0.152
30	Sun	5	33.6	1	6	14	18	11	13	49	21	49.22	16	9	16	13	0.120
31	Mon	6	27.3	1	6	14	22	5	14	8	56	48.66	16	9	16	15	0.088

* Mean Time may be found by subtracting 0^s.18 from the *Sidereal*.

‡ The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's		Sideral Time of the Sun's Semidi- ameter passing the Meridian.*	THE SUN'S								Equation of Time.	Diff for 1 hour				
		Southing	or Meridian Passage.		Apparent Right Ascension.			Apparent Declination.			Diff. for 1 hour	Semi-diameter. ‡						
		h	m	m	s	h	m	s	°	'	"	"	'	"	m	s	s	
1	Tue	7	17.3	1	6	14	26	0	14	28	17	S	48.08	16	10	16	17	0.056
2	Wed	8	3.9	1	7	14	29	55	14	47	24		47.48	16	10	16	18	0.054
3	Thu	8	47.9	1	7	14	33	52	15	6	16		46.87	16	10	16	18	0.060
4	Fri	9	30.2	1	7	14	37	49	15	24	53		46.24	16	10	16	18	0.043
5	Sat	10	11.7	1	7	14	41	47	15	43	15		45.60	16	11	16	16	0.077
6	Sun	10	53.0	1	7	14	45	46	16	1	21		44.94	16	11	16	14	0.111
7	Mon	11	35.1	1	7	14	49	46	16	19	11		44.26	16	11	16	11	0.146
8	Tue	12	18.4	1	7	14	53	46	16	36	45		43.56	16	11	16	7	0.181
9	Wed	13	3.5	1	7	14	57	47	16	54	2		42.85	16	12	16	2	0.217
10	Thu	13	50.6	1	8	15	1	50	17	11	1		42.12	16	12	15	56	0.253
11	Fri	14	39.4	1	8	15	5	53	17	27	43		41.38	16	12	15	50	0.288
12	Sat	15	29.6	1	8	15	9	57	17	44	7		40.62	16	12	15	43	0.324
13	Sun	16	20.7	1	8	15	14	1	18	0	13		39.85	16	12	15	34	0.360
14	Mon	17	11.8	1	8	15	18	7	18	15	59		39.06	16	13	15	25	0.396
15	Tue	18	2.6	1	8	15	22	13	18	31	27		38.26	16	13	15	15	0.432
16	Wed	18	52.9	1	8	15	26	21	18	46	35		37.44	16	13	15	5	0.468
17	Thu	19	43.0	1	8	15	30	29	19	1	23		36.59	16	13	14	53	0.503
18	Fri	20	33.6	1	8	15	34	38	19	15	51		35.74	16	13	14	40	0.538
19	Sat	21	25.3	1	9	15	38	48	19	29	58		34.87	16	14	14	27	0.573
20	Sun	22	19.3	1	9	15	42	59	19	43	44		33.98	16	14	14	13	0.608
21	Mon	23	16.0	1	9	15	47	10	19	57	8		33.08	16	14	13	58	0.643
22	Tue	conjunc		1	9	15	51	23	20	10	11		32.16	16	14	13	42	0.676
23	Wed	0	15.8	1	9	15	55	36	20	22	51		31.23	16	14	13	25	0.709
24	Thu	1	17.8	1	9	15	59	50	20	35	9		30.28	16	15	13	8	0.741
25	Fri	2	20.3	1	9	16	4	5	20	47	4		29.32	16	15	12	50	0.773
26	Sat	3	21.2	1	9	16	8	20	20	58	36		28.34	16	15	12	31	0.805
27	Sun	4	18.6	1	9	16	12	36	21	9	44		27.34	16	15	12	11	0.832
28	Mon	5	11.7	1	10	16	16	53	21	20	27		26.33	16	15	11	51	0.861
29	Tue	6	0.7	1	10	16	21	11	21	30	47		25.31	16	15	11	30	0.889
30	Wed	6	46.2	1	10	16	25	29	21	40	42		24.28	16	16	11	8	0.915

* Mean Time may be found by subtracting 0^s.19 from the *Sidereal*.
 † The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

AT GREENWICH MEAN NOON.

Day of the Month.	Day of the Week.	Moon's		Sider'l Time of the Sun's Semidi- ameter pass- ing the Meridi- an.*	THE SUN'S							Equation of Time.	Diff. for 1 hour			
		Southings	or Meridian Passage.		Apparent Right Ascension.	Apparent Declination.	Diff. for 1 hour	Semi- diam- eter.‡								
		h	m	m s	h	m	s	°	'	"	"	'	"	m	s	s
1	Thu	7	29·3	1 10	16	29	48	21	50	12 S	23·24	16 16	10 46	0·942		
2	Fri	8	10·9	1 10	16	34	7	21	59	17	22·18	16 16	10 23	0·968		
3	Sat	8	52 1	1 10	16	38	27	22	7	56	21·11	16 16	10 0	0·993		
4	Sun	9	33·6	1 10	16	42	48	22	16	9	20 03	16 16	9 35	1·016		
5	Mon	10	16·3	1 10	16	47	9	22	23	57	18·95	16 16	9 11	1·039		
6	Tue	11	0·8	1 10	16	51	31	22	31	18	17·85	16 16	8 46	1·061		
7	Wed	11	47·4	1 10	16	55	53	22	38	13	16·75	16 17	8 20	1·082		
8	Thu	12	36·0	1 10	17	0	16	22	44	42	15·64	16 17	7 54	1·102		
9	Fri	13	26·3	1 10	17	4	39	22	50	43	14·52	16 17	7 27	1·121	Add to Mean Time.	
10	Sat	14	17·4	1 10	17	9	3	22	56	18	13·39	16 17	7 0	1·189		
11	Sun	15	8·6	1 11	17	13	27	23	1	26	12·25	16 17	6 32	1·156		
12	Mon	15	59·2	1 11	17	17	51	23	6	6	11·11	16 17	6 4	1·171		
13	Tue	16	48·8	1 11	17	22	16	23	10	18	9·96	16 17	5 36	1·185		
14	Wed	17	37·5	1 11	17	26	41	23	14	3	8·80	16 17	5 8	1·199		
15	Thu	18	26·0	1 11	17	31	7	23	17	21	7·64	16 17	4 39	1·211		
16	Fri	19	15·0	1 11	17	35	33	23	20	10	6·48	16 17	4 9	1·221		
17	Sat	20	5·6	1 11	17	39	59	23	22	31	5·31	16 18	3 40	1·230		
18	Sun	20	58 9	1 11	17	44	25	23	24	24	4·14	16 18	3 10	1·238		
19	Mon	21	55·4	1 11	17	48	51	23	25	50	2·96	16 18	2 41	1·245		
20	Tue	22	55 5	1 11	17	53	18	23	26	47	1·78	16 18	2 11	1·250		
21	Wed	23	58·0	1 11	17	57	44	23	27	15	0·61	16 18	1 41	1·253		
22	Thu	conjunc		1 11	18	2	11	23	27	16	0·57	16 18	1 11	1·255		
23	Fri	1 0·8		1 11	18	6	38	23	26	48	1·75	16 18	0 40	1·254		
24	Sat	2 1·8		1 11	18	11	4	23	25	51	2·93	16 18	0 10	1·252		
25	Sun	2 58·9		1 11	18	15	31	23	24	27	4·11	16 18	0 20	1·248	Subtract from Mean.	
26	Mon	3 51·5		1 11	18	19	57	23	22	34	5·29	16 18	0 50	1·243		
27	Tue	4 40·0		1 11	18	24	24	23	20	13	6·46	16 18	1 19	1·236		
28	Wed	5 25·1		1 11	18	28	50	23	17	24	7·64	16 18	1 49	1·228		
29	Thu	6 8·0		1 11	18	33	16	23	14	7	8·81	16 18	2 18	1·218		
30	Fri	6 49·6		1 11	18	37	41	23	10	22	9·97	16 18	2 47	1·207		
31	Sat	7 31·0		1 11	18	42	7	23	6	9	11·13	16 18	3 16	1·195		

* Mean Time may be found by subtracting 0s·19 from the *Sidereal*.

† The Semidiameter for *Apparent Noon* may be assumed the same as that for *Mean Noon*.

BRISTOL CHANNEL LIGHTS AND TOWER FOR SHIPS' GUIDANCE.

NAMES OF PLACES.	LIGHTS.	HOW SHOWN.	DISTANCE SEEN.	ELEVATION OF LIGHTS, WITH REMARKS.
TREVOSE HEAD	Two..	{ Upper, fixed .. Lower, " ..	.....	Upper, 204 feet, seen from South to E. $\frac{1}{2}$ S. Lower, 129 feet, seen from N.E. $\frac{1}{4}$ E. to S.W. $\frac{1}{4}$ W. Elevated 264 feet above the level of the sea.
PADSTOW	Tower	{ Upper, revolves. Lower, fixed ..	8 leag. clear weath. 30 miles	Upper, 528 ft. revolves in 2 m. and seen all round. Lower, 9 ft. from ground, increased in power.
LUNDY ISLAND	Two..	{ Upper, fixed .. Lower, " ..	28 miles	Upper, 86 ft. }
BIDEFORD	Two..	{ Upper, fixed .. Lower, " ..	15 miles	Lower, 40 ft. } being 933 ft. asunder.
ILFRACOMBE, Harb.	One..	Fixed, red .....	.....	Shown from Michaelmas to Lady-day only.
MINEHEAD, Harbour	One..	Fixed .....	.....	Shown during Tide Time.
BURNHAM	Two..	{ Upper, flashes. Lower, fixed ..	.....	Elevated 91 $\frac{1}{4}$ ft.; flashes in 3 $\frac{1}{2}$ m., and seen from N.b. W. to W.b. N.
FLATHOLM	One..	Fixed .....	.....	Elevated 23 ft., seen from N.W.b. W. $\frac{1}{2}$ W. to W.b. N.
FLOAT. LIGHT VESS.	One..	Revolving	16 miles	Elevated 156 ft. above high water.
FLOAT, LIGHT VESS.	One..	{ Upper, revolves. Lower, fixed, red	.....	Off the English Grounds.
AVON, River	One..	Fixed, red	12 miles	Near the W. end of the One Fathom Bank.
NASH POINT	Two..	{ Upper, fixed .. Lower, " ..	.....	Elevated 73 ft.; visible 12 miles.
MUMBLES	One..	Fixed .....	.....	Elevated 167 feet, } being 1000 feet asunder.
SWANSEA, Harbour..	One..	Fixed, red	15 miles	" 123 feet, }
SCARWEATHER SAND	One..	Revolving, red ..	9 miles clear weath	Elevated 114 feet, }
LIGHT VESSEL	One..	Revolving .....	.....	" 28 feet, } above high-water level.
PORTHCAWL Harbour	One..	Fixed .....	.....	Elevated 38 feet; flashes in 20 seconds.
CALDY ISLAND	One..	Fixed .....	.....	Seen from sun-set to sun-rise, sides red, with, "Helwick" painted on them.
ST. ANN'S POINT ..	Two..	{ Upper, fixed .. Lower, " ..	19 miles	Upper 192 feet, }
SMALLS	One..	Fixed, white	17 miles	Lower 159 feet, } above the level of the sea.
			15 miles	Elevated 70 feet above high-water level.

TIDE TABLES.

EXPLANATION.

The Tides in this work are calculated for Greenwich Mean Time, and the Height for that Tide nearest mid-day at the following places:—

BARNSTAPLE.—*The Bar.*

BRIDGEWATER.—*The Bridge. The Time of high-water at Bridgewater Bar is about 40 minutes earlier. The depth of water at Cumbwitch Pill is 7 to 8 feet more than in the Tables.*

BRISTOL.—*Cumberland Gates. The height at Bathurst Gates is 9 feet 2 inches less than in the Tables.*

BRITON FERRY.—*Neath Bar. At Vale of Neath Railway Wharf, the depth is 8 inches less than in the Tables; at Giant's Grave, 2 feet 6 inches less; Crown Works, and Neath Abbey 4 feet 6 inches less; Neath, 5 feet 6 inches less.*

CARDIFF.—*East Dock Sill. At the West Dock, the depth is 3 feet less than in the Tables; at the Glamorganshire Canal, 13 feet less.*

GLOUCESTER.—*Entrance to the Canal at Sharpness Point.*

ILFRACOMBE.—*Pier Head.*

LLANELLY.—*Dock Gates. At Burry Bar the depth of water is 8 feet more than in the Tables.*

NEWPORT.—*Dock Gates, which are about 40 feet above the bed of the river.*

MILFORD HAVEN.—*The heights are the rise above low-water at spring tides. The time at St. Ann's Lighthouse, is about 25 minutes earlier.*

SWANSEA.—*Entrance Channel. The depth of water at New Cut Bridge, is about 4 feet, and at Hafod Works 7 feet 6 inches less than in the Tables.*

PHASES OF THE MOON.

New Moon .. 2nd, 0h. 5m. a.m. | Last Quarter. 24th, 10h. 23m. a.m.
 First Quarter. 9th, 9h. 2m. p.m. | New Moon .. 31st, 3h. 41m. p.m.
 Full Moon .. 17th, 2h. 45m. p.m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgewater.					Bristol.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Saturday..	4	55	5	21	26	10	6	49	7	15	14	7	6	29	6	55	28	4
2	Sunday ..	5	45	6	8	26	11	7	40	8	5	14	8	7	20	7	45	28	6
3	Monday ..	6	31	6	51	27	0	8	27	8	47	14	9	8	7	8	27	28	8
4	Tuesday..	7	10	7	29	26	8	9	6	9	24	14	4	8	46	9	4	28	1
5	Wednesdy	7	49	8	9	26	1	9	42	10	1	13	8	9	22	9	41	27	0
6	Thursday.	8	28	8	46	25	5	10	18	10	34	12	10	9	58	10	14	25	9
7	Friday ..	9	3	9	20	24	8	10	49	11	4	11	10	10	29	10	44	24	4
8	Saturday..	9	38	9	57	23	10	11	19	11	37	10	10	10	59	11	17	22	10
9	Sunday ..	10	16	10	36	23	0	11	56	..	9	9	11	11	36	11	58	21	5
10	Monday..	10	58	11	25	22	2	0	18	0	44	8	9	..	0	24	19	11	11
11	Tuesday..	11	55	..	21	10	10	1	13	1	46	8	4	0	53	1	26	19	2
12	Wednesdy	0	28	1	5	21	11	2	19	2	53	8	5	1	59	2	33	19	4
13	Thursday.	1	42	2	19	22	7	3	28	4	5	9	3	3	8	3	45	20	7
14	Friday ..	2	51	3	21	23	7	4	40	5	12	10	6	4	20	4	52	22	5
15	Saturday..	3	47	4	13	24	9	5	40	6	7	12	0	5	20	5	47	24	6
16	Sunday ..	4	40	5	5	25	10	6	34	6	59	13	4	6	14	6	39	26	6
17	Monday..	5	26	5	50	26	4	7	21	7	46	13	11	7	1	7	26	27	6
18	Tuesday..	6	11	6	32	27	1	8	8	8	28	14	11	7	48	8	8	28	10
19	Wednesdy	6	53	7	15	27	6	8	49	9	11	15	5	8	29	8	51	29	8
20	Thursday.	7	35	7	58	27	8	9	30	9	51	15	7	9	10	9	31	29	11
21	Friday ..	8	21	8	43	27	5	10	12	10	31	15	3	9	52	10	11	29	6
22	Saturday..	9	3	9	25	26	9	10	49	11	7	14	6	10	29	10	47	28	2
23	Sunday ..	9	46	10	7	25	11	11	26	11	47	13	5	11	6	11	27	26	8
24	Monday..	10	29	10	52	24	9	..	0	10	12	0	11	11	50	..	24	6	11
25	Tuesday..	11	20	11	53	23	8	0	37	1	8	10	7	0	17	0	48	22	7
26	Wednesdy	..	0	0	32	23	0	1	43	2	22	9	9	1	23	2	2	21	5
27	Thursday	1	16	1	59	23	3	3	3	3	44	10	1	2	43	3	24	21	10
28	Friday ..	2	39	3	17	24	2	4	26	5	9	11	3	4	6	4	49	23	5
29	Saturday..	3	50	4	20	25	2	5	44	6	14	12	6	5	24	5	54	25	4
30	Sunday ..	4	48	5	13	25	11	6	42	7	8	13	5	6	22	6	46	26	8
31	Monday..	5	36	5	58	26	2	7	31	7	55	13	9	7	11	7	35	27	2

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 2nd, 0h. 5m. a.m.
First Quarter. 9th, 9h. 2m. p.m.
Full Moon .. 17th, 2h. 45m. p.m.

Last Quarter . 24th, 10h. 23m. a.m.
New Moon .. 31st, 3h. 41m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.						Cardiff.						Gloucester.					
		Morn.		Even.		Height		Morn.		Even		Height		Morn.		Even.		Height	
		H.	M.	H.	M	F.	I.	H.	M.	H.	M	F.	I.	H.	M.	H.	M.	F.	I.
1	Saturday.	5	30	5	56	21	1	6	21	6	47	29	3	7	14	7	40	27	1
2	Sunday ..	6	20	6	43	21	2	7	12	7	37	29	5	8	5	8	30	27	3
3	Monday..	7	6	7	26	21	3	7	59	8	19	29	6	8	52	9	12	27	5
4	Tuesday..	7	45	8	4	20	10	8	38	8	56	29	0	9	31	9	49	26	9
5	Wednesdy	8	24	8	44	20	2	9	14	9	33	28	1	10	7	10	26	25	7
6	Thursday	9	3	9	21	19	4	9	50	10	6	27	0	10	43	10	59	24	3
7	Friday ..	9	38	9	55	18	4	10	21	10	36	25	10	11	14	11	29	22	9
8	Saturday.	10	13	10	32	17	4	10	51	11	9	24	6	11	45	..	21	2	2
9	Sunday ..	10	51	11	11	16	3	11	28	11	50	23	3	0	2	0	21	19	7
10	Monday..	11	33	12	0	15	3	..	0	16	22	0	0	43	1	9	18	0	0
11	Tuesday..	..	0	30	14	10	0	45	1	18	21	5	1	38	2	11	17	3	3
12	Wednesdy	1	3	1	40	14	11	1	51	2	25	21	6	2	44	3	18	17	5
13	Thursday.	1	17	2	54	15	9	3	0	3	37	22	7	3	53	4	30	18	9
14	Friday ..	3	26	3	56	17	0	4	12	4	44	24	2	5	5	5	37	20	8
15	Saturday.	4	22	4	48	18	6	5	12	5	39	26	0	6	5	6	32	23	0
16	Sunday ..	5	15	5	40	19	10	6	6	6	31	27	8	6	59	7	24	25	1
17	Monday..	6	1	6	25	20	5	6	53	7	18	28	6	7	46	8	11	26	1
18	Tuesday..	6	46	7	7	21	5	7	40	8	0	29	8	8	33	8	53	27	7
19	Wednesdy	7	28	7	50	21	11	8	21	8	43	30	4	9	14	9	36	28	5
20	Thursday.	8	10	8	33	22	1	9	2	9	23	30	7	9	55	10	16	28	9
21	Friday ..	8	56	9	18	21	10	9	44	10	3	30	2	10	37	10	56	28	3
22	Saturday..	9	38	10	0	21	0	10	21	10	39	29	1	11	14	11	32	26	11
23	Sunday ..	10	21	10	42	19	11	10	58	11	19	27	10	11	51	..	25	3	3
24	Monday..	11	4	11	27	18	6	11	42	..	26	0	0	12	0	35	23	0	0
25	Tuesday..	11	55	..	17	1	0	9	0	40	24	3	1	2	1	33	20	10	10
26	Wednesdy	0	28	1	7	18	3	1	15	1	54	23	3	2	8	2	47	19	7
27	Thursday.	1	51	2	34	16	7	2	35	3	16	23	8	3	28	4	9	20	1
28	Friday ..	3	14	3	52	17	9	3	58	4	41	25	0	4	51	5	34	21	9
29	Saturday..	4	25	4	55	19	0	5	16	5	46	26	7	6	9	6	39	23	9
30	Sunday ..	5	23	5	48	19	11	6	14	6	40	27	10	7	7	7	33	25	3
31	Monday..	6	11	6	33	20	3	7	3	7	27	28	3	7	56	8	20	25	9

The above are in Greenwich Mean Time, if local Time be required for Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 2nd, 0h. 5m. a.m. | Last Quarter. 24th, 10h. 23m. a.m.
 First Quarter. 9th, 9h. 2m. p.m. | New Moon .. 31st, 3h. 41m. p.m.
 Full Moon .. 17th, 2h. 45m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.					Llanelly.					Milford Haven.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H.	M.	H.	M.	F.	H.	M.	H.	M.	F.	H.	M.	H.	M.	F.
1	Saturday..	5	5	5	31	20	7	5	40	6	6	21	1	5	40	6
2	Sunday ..	5	55	6	18	20	8	6	30	6	53	21	2	6	30	6
3	Monday ..	6	41	7	1	20	9	7	16	7	36	21	3	7	16	7
4	Tuesday..	7	20	7	39	20	4	7	55	8	14	20	10	7	55	8
5	Wednesday	7	59	8	19	19	9	8	34	8	54	20	3	8	34	8
6	Thursday.	8	38	8	56	19	0	9	13	9	31	19	6	9	13	9
7	Friday ..	9	13	9	30	18	2	9	48	10	5	18	8	9	48	10
8	Saturday .	9	48	10	7	17	4	10	23	10	42	17	10	10	23	10
9	Sunday ..	10	26	10	46	16	4	11	1	11	21	16	10	11	1	11
10	Monday..	11	8	11	35	15	6	11	43	..	16	0	11	43	..	15
11	Tuesday..	..	0	5	15	1	0	10	0	40	15	7	3	10	0	40
12	Wednesday	0	38	1	15	15	2	1	13	1	50	15	8	1	13	1
13	Thursday.	1	52	2	29	15	11	2	27	3	4	16	5	2	27	3
14	Friday ..	3	1	3	31	17	0	3	36	4	6	17	6	3	36	4
15	Saturday .	3	57	4	23	18	4	4	32	4	58	18	10	4	32	4
16	Sunday ..	4	50	5	15	19	6	5	25	5	50	20	0	5	25	5
17	Monday..	5	36	6	0	20	0	6	11	6	35	20	6	6	11	6
18	Tuesday..	6	21	6	42	20	10	6	56	7	17	21	4	6	56	7
19	Wednesday	7	3	7	25	21	4	7	38	8	0	21	10	7	38	8
20	Thursday.	7	45	8	8	21	6	8	20	8	43	22	0	8	20	8
21	Friday ..	8	31	8	53	21	3	9	6	9	28	21	9	9	6	9
22	Saturday .	9	13	9	35	20	6	9	48	10	10	21	0	9	48	10
23	Sunday ..	9	56	10	17	19	7	10	31	10	52	20	1	10	31	10
24	Monday..	10	39	11	2	18	4	11	14	11	37	18	10	11	14	11
25	Tuesday..	11	30	..	17	1	..	..	0	5	17	7	..	..	0	5
26	Wednesday	0	3	0	42	16	4	0	38	1	17	16	10	0	38	1
27	Thursday.	1	26	2	9	16	8	2	1	2	44	17	2	2	1	2
28	Friday ..	2	49	3	27	17	8	3	24	4	2	18	2	3	24	4
29	Saturday..	4	0	4	30	18	9	4	35	5	5	19	3	4	35	5
30	Sunday ..	4	58	5	23	19	7	5	33	5	58	20	1	5	33	5
31	Monday..	5	46	6	8	19	10	6	21	6	43	20	4	6	21	6

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 2nd, 0h. 5m. a.m. | Last Quarter . 24th, 10h. 23m. a.m.
 First Quarter. 9th, 9h. 2m. p.m. | New Moon .. 31st, 3h. 41m p.m.
 Full Moon .. 17th, 2h. 45m. p.m.

M. D.	W. D.	Newport.						Swansea.						Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Morn.		Even.	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.	H.	M.
1	Sat	6	29	6	55	28	7	5	30	5	56	22	1	10	42	11	7	1	8	1	36
2	Sun	7	20	7	45	28	9	6	20	6	43	22	2	11	30	11	54	2	0	2	23
3	Mo	8	7	8	27	28	11	7	6	7	26	22	3	..	0	17	2	46	3	9	
4	Tu	8	46	9	4	28	4	7	45	8	4	21	10	0	37	0	67	3	31	3	50
5	Wd	9	22	9	41	27	4	8	24	8	44	21	2	1	16	1	35	4	9	4	28
6	Th	9	58	10	14	26	1	9	3	9	21	20	4	1	54	2	13	4	47	5	7
7	Fri	10	29	10	44	24	9	9	38	9	55	19	4	2	32	2	49	5	26	5	45
8	Sat	10	59	11	17	23	2	10	13	10	32	18	4	3	7	3	27	6	4	6	23
9	Sun	11	36	11	58	21	10	10	51	11	11	17	3	3	48	4	11	6	43	7	5
10	Mo	..	0	24	20	3	11	11	33	12	0	16	3	4	36	5	6	7	28	7	53
11	Tu	0	53	1	26	19	7	..	0	30	15	10	5	5	39	6	16	8	22	8	56
12	Wd	1	59	2	33	19	9	1	3	1	40	15	11	6	52	7	26	9	29	10	2
13	Th	3	8	3	45	21	0	1	17	2	54	16	9	7	58	8	30	10	35	11	9
14	Fri	4	20	4	52	22	10	3	26	3	56	18	0	8	59	9	24	11	43	..	..
15	Sat	5	20	5	47	24	11	4	22	4	48	19	6	9	45	10	7	0	12	0	38
16	Sun	6	14	6	39	26	11	5	15	5	40	20	10	10	29	10	52	1	0	1	24
17	Mo	7	1	7	26	27	10	6	1	6	25	21	5	11	12	11	35	1	47	2	9
18	Tu	7	48	8	8	29	1	6	46	7	7	22	5	11	57	..	..	2	28	2	51
19	Wd	8	29	8	51	29	11	7	28	7	50	22	11	0	18	0	39	3	12	3	32
20	Th	9	10	9	31	30	2	8	16	8	33	23	1	1	2	1	22	3	52	4	14
21	Fri	9	52	10	11	29	9	8	56	9	18	22	10	1	41	2	6	4	34	4	56
22	Sat	10	29	10	47	28	5	9	38	10	0	22	0	2	28	2	49	5	19	5	41
23	Sun	11	6	11	27	27	1	10	21	10	42	20	11	3	12	3	35	6	4	6	28
24	Mo	11	50	..	24	11	11	11	4	11	27	19	6	4	0	4	28	6	52	7	17
25	Tu	0	17	0	48	22	11	11	55	..	18	1	4	59	5	33	7	45	8	15	
26	Wd	1	23	2	2	21	10	0	28	1	7	17	3	6	13	6	55	8	50	9	27
27	Th	2	43	3	24	22	3	1	51	2	34	17	7	7	35	8	13	10	5	10	45
28	Fri	4	6	4	49	23	9	3	14	3	52	18	9	8	48	9	21	11	25	..	..
29	Sat	5	24	5	54	25	8	4	25	4	55	20	0	9	48	10	13	0	1	0	35
30	Sun	6	22	6	48	27	1	5	23	5	48	20	11	10	36	11	0	1	4	1	30
31	Mo	7	11	7	35	27	6	6	11	6	33	21	3	11	21	11	44	1	54	2	16

The above are in Greenwich Mean Time, if local time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.
 For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 8th, 6h. 19m. p.m. | Last Quarter. 22nd, 6h. 46m. p.m.
 Full Moon .. 16th, 3h. 28m. a.m.

M D.	WEEK DAYS.	Barnstaple.					Bridgewater.					Bristol.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Tuesday..	6	19	6	39	26	8	8	15	8	35	14	4	7	55	8	15	28	1
2	Wednesday	6	55	7	12	26	10	8	51	9	8	14	7	8	31	8	48	28	4
3	Thursday..	7	28	7	45	26	8	9	23	9	38	14	4	9	3	9	18	28	1
4	Friday ..	8	3	8	19	26	4	9	55	10	10	13	11	9	35	9	50	27	6
5	Saturday..	8	35	8	50	25	8	10	24	10	37	13	1	10	4	10	17	26	2
6	Sunday ..	9	5	9	21	24	10	10	51	11	5	12	1	10	31	10	45	24	8
7	Monday..	9	37	9	53	23	11	11	18	11	34	10	11	10	58	11	14	23	0
8	Tuesday..	10	11	10	30	22	11	11	51	..	9	8	11	31	11	51	21	2	3
9	Wednesday	10	53	11	23	21	11	0	11	0	38	8	5	..	0	18	19	4	6
10	Thursday	11	55	..	21	5	1	1	11	1	46	7	9	0	51	1	26	18	6
11	Friday ..	0	33	1	17	21	8	2	23	3	4	8	0	2	3	2	44	18	10
12	Saturday..	2	1	2	39	22	8	3	47	4	26	9	4	3	27	4	6	20	9
13	Sunday ..	3	15	3	48	24	1	5	6	5	41	11	2	4	46	5	21	23	4
14	Monday..	4	14	4	43	25	8	6	8	6	37	13	1	5	48	6	17	26	2
15	Tuesday..	5	9	5	32	26	6	7	3	7	26	14	2	6	43	7	6	27	10
16	Wednesday	5	54	6	16	27	9	7	50	8	12	15	9	7	30	7	52	30	1
17	Thursday..	6	38	6	58	28	7	8	34	8	54	16	9	8	14	8	34	31	6
18	Friday ..	7	19	7	40	28	10	9	15	9	35	17	1	8	55	9	15	32	0
19	Saturday..	8	2	8	24	28	8	9	54	10	14	16	10	9	34	9	54	31	8
20	Sunday ..	8	45	9	6	28	0	10	33	10	52	16	0	10	13	10	32	30	6
21	Monday..	9	25	9	46	26	7	11	7	11	26	14	3	10	47	11	6	28	0
22	Tuesday..	10	8	10	30	25	2	11	48	..	12	6	11	28	11	51	25	4	3
23	Wednesday	10	56	11	26	23	5	0	11	0	41	10	4	..	0	21	22	2	2
24	Thursday..	..	0	5	22	2	1	1	15	1	56	8	9	0	55	1	36	19	11
25	Friday ..	0	51	1	41	22	2	2	41	3	27	8	9	2	21	3	7	19	11
26	Saturday..	2	26	3	4	23	1	4	12	4	54	9	11	3	52	4	34	21	7
27	Sunday ..	3	39	4	8	24	4	5	32	6	1	11	5	5	12	5	41	23	9
28	Monday..	4	35	5	1	25	6	6	29	6	55	12	11	6	9	6	35	25	11

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 8th, 6h. 19m. p.m. | Last Quarter. 22nd, 6h. 46m. p.m.
 Full Moon .. 16th, 3h. 28m. a.m. |

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Tuesday..	6	54	7	14	20	10	7	47	8	7	29	0
2	Wednesday	7	30	7	47	21	1	8	23	8	40	29	3
3	Thursday..	8	3	8	20	20	10	8	55	9	10	29	0
4	Friday ..	8	38	8	54	20	5	9	27	9	42	28	6
5	Saturday..	9	10	9	25	19	7	9	56	10	9	27	5
6	Sunday ..	9	40	9	56	18	7	10	23	10	37	26	1
7	Monday...	10	12	10	28	17	5	10	50	11	6	24	8
8	Tuesday..	10	46	11	5	16	2	11	23	11	43	23	2
9	Wednesday	11	28	11	58	14	11	..	0	10	21	6	0
10	Thursday..	..	0	30	14	3	0	43	1	18	20	9	1
11	Friday ..	1	8	1	52	14	6	1	55	2	36	21	1
12	Saturday..	2	36	3	14	15	10	3	19	3	58	22	9
13	Sunday ..	3	50	4	23	17	8	4	38	5	13	24	11
14	Monday..	4	49	5	18	19	7	5	40	6	9	27	5
15	Tuesday..	5	44	6	7	20	8	6	35	6	58	28	9
16	Wednesday	6	29	6	51	22	3	7	22	7	44	30	9
17	Thursday..	7	13	7	33	23	3	8	6	8	26	31	11
18	Friday ..	7	54	8	15	23	7	8	47	9	7	32	4
19	Saturday..	8	37	8	59	23	4	9	26	9	46	32	0
20	Sunday ..	9	20	9	41	22	6	10	5	10	24	31	1
21	Monday..	10	0	10	21	20	9	10	39	10	58	28	11
22	Tuesday..	10	43	11	5	19	0	11	20	11	43	26	7
23	Wednesday	11	31	..	16	10	..	..	0	13	23	11	0
24	Thursday..	0	1	0	40	15	3	0	47	1	28	22	0
25	Friday ..	1	26	2	16	15	3	2	13	2	59	22	0
26	Saturday..	3	1	3	39	16	5	3	44	4	26	23	5
27	Sunday ..	4	14	4	43	17	11	5	4	5	33	25	3
28	Monday..	5	10	5	36	19	5	6	1	6	27	27	2

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 16m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 8th, 6h. 19m. p.m. | Last Quarter. 22nd, 6h. 46m. p.m.
 Full Moon .. 16th, 3h. 28m. a.m. |

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Tuesday..	6	29	6	49	20	4	7	4	7	24	20	2
2	Wednesday	7	5	7	22	20	7	7	40	7	57	21	4
3	Thursday	7	38	7	55	20	4	8	13	8	30	20	2
4	Friday ..	8	13	8	29	20	0	8	48	9	4	20	6
5	Saturday..	8	45	9	0	19	3	9	20	9	35	19	9
6	Sunday ..	9	15	9	31	18	5	9	50	10	6	18	11
7	Monday..	9	47	10	3	17	5	10	22	10	38	17	11
8	Tuesday..	10	21	10	40	16	3	10	56	11	15	16	9
9	Wednesday	11	3	11	32	15	2	11	38	..	15	8	11
10	Thursday..	..	0	5	14	7	7	0	8	0	40	15	1
11	Friday ..	0	43	1	27	14	10	1	18	2	2	15	4
12	Saturday..	2	11	2	49	16	0	2	46	3	24	16	6
13	Sunday ..	3	25	3	58	17	7	4	0	4	33	18	1
14	Monday..	4	24	4	53	19	3	4	59	5	28	19	9
15	Tuesday..	5	19	5	42	20	2	5	54	6	17	20	8
16	Wednesday	6	4	6	26	21	7	6	39	7	1	22	1
17	Thursday..	6	48	7	8	22	6	7	23	7	43	23	0
18	Friday ..	7	29	7	50	22	9	8	4	8	25	23	3
19	Saturday..	8	12	8	34	22	7	8	47	9	9	23	1
20	Sunday ..	8	55	9	16	21	10	9	30	9	51	22	4
21	Monday..	9	35	9	56	20	3	10	10	10	31	20	9
22	Tuesday..	10	18	10	40	18	9	10	53	11	15	19	3
23	Wednesday	11	6	11	36	16	10	11	41	..	17	4	11
24	Thursday..	..	0	15	15	6	6	0	11	0	50	16	0
25	Friday ..	1	1	1	51	15	6	1	36	2	26	16	0
26	Saturday..	2	36	3	14	16	6	3	11	3	49	17	0
27	Sunday ..	3	49	4	18	17	10	4	24	4	53	18	4
28	Monday..	4	45	5	11	19	1	5	20	5	46	19	7

The above are in Greenwich Mean Time, if local Time be required for
 Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 8th, 6h. 19m. p.m. | Last Quarter. 22nd, 6h. 46m. p.m.
 Full Moon .. 16th, 3h. 28m. a.m.

M. D.	W. D.	Newport.				Swansea.				Liverpool.		London.	
		Morn.		Even.		Height		Morn.		Even.		Morn.	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.
1	Tu	7	55	8	15	28	4	6	54	7	14	21	10
2	Wd	8	31	8	48	28	7	7	30	7	47	22	1
3	Th	9	3	9	18	28	4	8	3	8	20	21	10
4	Fri	9	35	9	50	27	10	8	38	8	54	21	5
5	Sat	10	4	10	17	26	7	9	10	9	25	20	7
6	Sun	10	31	10	45	25	0	9	40	9	56	19	7
7	Mo	10	58	11	14	23	4	10	12	10	28	18	5
8	Tu	11	31	11	51	21	8	10	46	11	5	17	2
9	Wd	..	..	0	18	19	9	11	28	11	58	15	11
10	Th	0	51	1	26	18	10	..	..	0	30	15	3
11	Fri	2	3	2	44	19	3	1	8	1	52	15	6
12	Sat	3	27	4	6	21	2	2	36	3	14	16	10
13	Sun	4	46	5	21	23	8	3	50	4	23	18	8
14	Mo	5	48	6	17	26	7	4	49	5	18	20	7
15	Tu	6	43	7	6	28	1	5	44	6	7	21	8
16	Wd	7	30	7	52	30	4	6	29	6	51	23	3
17	Th	8	14	8	34	31	8	7	13	7	33	24	3
18	Fri	8	55	9	15	32	2	7	54	8	15	24	7
19	Sat	9	34	9	54	31	10	8	37	8	59	24	4
20	Sun	10	13	10	32	30	9	9	20	9	41	23	6
21	Mo	10	47	11	6	28	3	10	0	10	21	21	9
22	Tu	11	28	11	51	25	8	10	43	11	5	20	0
23	Wd	..	..	0	21	22	7	11	31	..	..	17	10
24	Th	0	55	1	36	20	3	0	1	0	40	16	3
25	Fri	2	21	3	7	20	3	1	26	2	16	16	3
26	Sat	3	52	4	34	22	0	3	1	3	39	17	5
27	Sun	5	12	5	41	24	0	4	14	4	43	18	11
28	Mo	6	9	6	35	26	3	5	10	5	36	20	5

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

D

PHASES OF THE MOON.

New Moon .. 2nd, 8h. 40m. a.m. | Full Moon .. 17th, 1h. 52m. p.m.
 First Quarter. 10th, 1h. 12m. p.m. | Last Quarter. 24th, 4h. 37m. a.m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgewater.					Bristol.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Tuesday..	5	21	5	42	25	10	7	15	7	37	13	4	6	55	7	17	26	6
2	Wednesday	5	59	6	17	26	6	7	56	8	13	14	2	7	36	7	53	27	14
3	Thursday..	6	32	6	48	27	0	8	28	8	44	14	9	8	8	8	24	28	8
4	Friday ..	7	3	7	18	27	1	8	59	9	14	14	11	8	39	8	54	28	10
5	Saturday..	7	34	7	50	26	10	9	29	9	43	14	7	9	9	9	23	28	4
6	Sunday ..	8	3	8	17	26	4	9	55	10	8	13	11	9	35	9	48	27	6
7	Monday..	8	34	8	49	25	6	10	23	10	36	12	11	10	3	10	16	25	11
8	Tuesday..	9	4	9	18	24	6	10	50	11	2	11	8	10	30	10	42	24	0
9	Wednesday	9	37	9	56	23	5	11	18	11	36	10	4	10	58	11	16	22	2
10	Thursday..	10	17	10	39	22	3	11	57	..	8	10	11	11	37	..	20	0	0
11	Friday ..	11	9	11	44	21	5	0	22	0	56	7	9	0	2	0	36	13	6
12	Saturday..	..	..	0	28	21	4	1	34	2	19	7	7	1	14	1	59	18	4
13	Sunday ..	1	17	2	0	22	2	3	4	3	45	8	9	2	44	3	25	19	11
14	Monday..	2	42	3	16	23	11	4	30	5	7	10	11	4	10	4	47	23	0
15	Tuesday..	3	47	4	14	25	10	5	40	6	8	13	4	5	20	5	48	26	6
16	Wednesday	4	43	5	10	27	7	6	37	7	4	15	6	6	17	6	44	29	10
17	Thursday..	5	33	5	54	28	5	7	27	7	50	16	7	7	7	7	30	31	2
18	Friday ..	6	14	6	35	29	4	8	11	8	31	17	8	7	51	8	11	32	11
19	Saturday..	6	56	7	18	29	9	8	52	9	14	18	3	8	32	8	54	33	7
20	Sunday ..	7	40	8	3	29	5	9	35	9	55	17	10	9	15	9	35	33	0
21	Monday..	8	24	8	45	28	5	10	14	10	33	16	7	9	54	10	13	31	2
22	Tuesday..	9	5	9	25	26	9	10	51	11	6	14	6	10	31	10	48	28	2
23	Wednesday	9	48	10	11	25	0	11	29	11	51	12	3	11	9	11	31	25	0
24	Thursday..	10	37	11	7	23	0	..	..	0	19	9	9	11	59	..	21	5	0
25	Friday ..	11	45	..	..	21	7	0	53	1	35	7	11	0	33	1	15	18	9
26	Saturday..	0	29	1	18	21	6	2	20	3	5	7	10	2	0	2	45	18	7
27	Sunday ..	2	4	2	45	22	7	3	49	4	33	9	3	3	29	4	13	20	7
28	Monday..	3	17	3	48	23	11	5	9	5	41	10	11	4	49	5	21	23	0
29	Tuesday..	4	10	4	34	25	2	6	4	6	28	12	6	5	44	6	8	25	4
30	Wednesday	4	55	5	15	26	1	6	49	7	9	13	8	6	29	6	49	27	0
31	Thursday..	5	33	5	49	26	5	7	27	7	45	14	1	7	7	7	25	27	5

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 2nd, 8h. 40m. a.m. | Full Moon .. 17th, 1h. 52m. p.m.
 First Quarter. 10th, 1h. 12m. p.m. | Last Quarter . 24th, 4h. 37m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.					Cardiff.					Gloucester.				
		Morn.		Even.		Height	Morn.		Even		Height	Morn.		Even.		Height
		H. M.	H. M.	F. I.	F. I.		H. M.	H. M.	F. I.	F. I.		H. M.	H. M.	F. I.	F. I.	
1	Tuesday..	5 56	6 17	19	10		6 47	7 9	27	8		7 40	8 2	25	1	
2	Wednesdy	6 34	6 52	20	8		7 28	7 45	28	9		8 21	8 38	26	5	
3	Thursday.	7 7	7 23	21	3		8 0	8 16	29	6		8 53	9 9	27	5	
4	Friday ..	7 38	7 53	21	5		8 31	8 46	29	8		9 24	9 39	27	7	
5	Saturday.	8 9	8 25	21	1		9 1	9 15	29	3		9 54	10 8	27	1	
6	Sunday ..	8 38	8 52	20	5		9 27	9 40	28	6		10 20	10 38	26	1	
7	Monday..	9 9	9 24	19	5		9 55	10 8	27	2		10 48	11 1	24	5	
8	Tuesday..	9 39	9 53	18	2		10 22	10 34	25	6		11 15	11 27	22	5	
9	Wednesday	10 12	10 31	16	10		10 50	11 8	23	11		11 44	..	20	5	
10	Thursday.	10 52	11 14	15	4		11 29	11 54	22	1		0 1	0 22	18	2	
11	Friday ..	11 44	..	14	3		..	0 28	20	9		0 47	1 21	16	5	
12	Saturday.	0 19	1 3	14	1		1 6	1 51	20	7		1 59	2 44	16	3	
13	Sunday ..	1 52	2 35	15	3		2 36	3 17	22	0		3 29	4 10	18	0	
14	Monday..	3 17	3 51	17	5		4 2	4 39	24	8		4 55	5 32	21	4	
15	Tuesday..	4 22	4 49	19	10		5 12	5 40	27	8		6 5	6 33	25	1	
16	Wednesdy	5 18	5 45	22	0		6 9	6 36	30	6		7 2	7 29	28	7	
17	Thursday.	6 8	6 29	23	1		6 59	7 22	31	8		7 52	8 15	30	1	
18	Friday ..	6 49	7 10	24	2		7 43	8 3	33	2		8 36	8 56	31	11	
19	Saturday..	7 31	7 53	24	9		8 24	8 46	33	9		9 17	9 39	32	8	
20	Sunday ..	8 15	8 38	24	4		9 7	9 27	33	3		10 0	10 20	32	1	
21	Monday..	8 59	9 20	23	1		9 46	10 5	31	8		10 39	10 58	30	1	
22	Tuesday..	9 40	10 0	21	0		10 23	10 40	29	1		11 16	11 33	26	11	
23	Wednesday	10 23	10 46	18	9		11 1	11 23	26	5		11 54	..	23	6	
24	Thursday.	11 12	11 42	16	3		11 51	..	23	3		0 16	0 44	19	7	
25	Friday ..	..	0 20	14	5		0 25	1 7	21	0		1 18	2 0	16	9	
26	Saturday..	1 4	1 53	14	4		1 52	2 37	20	10		2 45	3 30	16	7	
27	Sunday ..	2 39	3 20	15	9		3 21	4 5	22	7		4 14	4 58	18	9	
28	Monday..	3 52	4 23	17	5		4 41	5 13	24	8		5 34	6 6	21	4	
29	Tuesday..	4 45	5 9	19	0		5 36	6 0	26	7		6 29	6 53	23	9	
30	Wednesday	5 30	5 50	20	2		6 21	6 41	28	1		7 14	7 34	25	7	
31	Thursday.	6 8	6 24	20	7		6 59	7 17	28	7		7 52	8 10	26	3	

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 2nd, 8h. 40m. a.m. | Full Moon .. 17th, 1h. 52m. p.m.
 First Quarter. 10th, 1h. 12m. p.m. | Last Quarter. 24th, 4h. 37m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Tuesday..	5	31	5	52	19	6	6	6	6	27	20	0
2	Wednesday	6	9	6	27	20	2	6	44	7	2	20	8
3	Thursday..	6	42	6	58	20	9	7	17	7	33	21	3
4	Friday ..	7	13	7	28	20	10	7	48	8	3	21	4
5	Saturday..	7	44	8	0	20	7	8	19	8	35	21	1
6	Sunday ..	8	13	8	27	20	0	8	48	9	2	20	6
7	Monday..	8	44	8	59	19	1	9	19	9	34	19	7
8	Tuesday..	9	14	9	28	18	0	9	49	10	3	18	6
9	Wednesday	9	47	10	6	16	10	10	22	10	41	17	4
10	Thursday..	10	27	10	49	15	7	11	2	11	24	16	1
11	Friday ..	11	19	11	54	14	7	11	54	..	15	1	1
12	Saturday..	..	0	38	14	6	6	0	29	1	13	15	0
13	Sunday ..	1	27	2	10	15	6	2	2	2	45	16	0
14	Monday..	2	52	3	26	17	5	3	27	4	1	17	11
15	Tuesday..	3	57	4	24	19	6	4	32	4	59	20	0
16	Wednesday	4	53	5	20	21	5	5	28	5	55	21	11
17	Thursday..	5	43	6	4	22	4	6	18	6	39	22	10
18	Friday ..	6	24	6	45	23	3	6	59	7	20	23	9
19	Saturday..	7	6	7	28	23	9	7	41	8	3	24	3
20	Sunday ..	7	50	8	13	23	5	8	25	8	48	23	11
21	Monday..	8	34	8	55	22	4	9	9	9	30	22	10
22	Tuesday..	9	15	9	35	20	6	9	50	10	10	21	0
23	Wednesday	9	58	10	21	18	7	10	33	10	56	19	1
24	Thursday..	10	47	11	17	16	4	11	22	11	52	16	10
25	Friday ..	11	55	..	14	9	9	..	0	30	15	3	3
26	Saturday..	0	39	1	28	14	8	1	14	2	3	15	2
27	Sunday ..	2	14	2	55	15	11	2	49	3	30	16	5
28	Monday..	3	27	3	58	17	5	4	2	4	33	17	11
29	Tuesday..	4	20	4	44	18	9	4	55	5	19	19	3
30	Wednesday	5	5	5	25	19	9	5	40	6	0	20	3
31	Thursday..	5	43	5	59	20	1	6	18	6	34	20	7

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 2nd, 8h. 40m. a.m. | Full Moon .. 17th, 1h. 52m. p.m.
 First Quarter. 10th, 1h. 12m. p.m. | Last Quarter. 24th, 4h. 37m. a.m.

M. D.	W. D.	Newport.					Swansea.					Liverpool.				London.					
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.		
1	Tu	6	55	7	17	26	11	5	56	6	17	20	10	11	7	11	27	1	43	2	5
2	Wd	7	36	7	53	28	1	6	34	6	52	21	8	11	45	..	..	2	23	2	43
3	Th	8	8	8	24	28	11	7	7	7	23	22	3	0	3	0	18	3	0	3	17
4	Fri	8	39	8	54	29	1	7	38	7	53	22	5	0	34	0	50	3	32	3	47
5	Sat	9	9	9	23	28	7	8	9	8	25	22	1	1	5	1	21	4	2	4	17
6	Sun	9	35	9	48	27	10	8	38	8	52	21	5	1	36	1	49	4	33	4	48
7	Mo	10	3	10	16	26	3	9	9	9	24	20	5	2	2	2	19	5	1	5	15
8	Tu	10	30	10	42	24	4	9	39	9	53	19	2	2	34	2	50	5	32	5	48
9	Wd	10	58	11	16	22	7	10	12	10	31	17	10	3	5	3	26	6	5	6	21
10	Th	11	37	..	..	20	5	10	52	11	14	16	4	3	47	4	12	6	42	7	4
11	Fri	0	2	0	36	18	10	11	44	..	..	15	3	4	41	5	20	7	29	7	58
12	Sat	1	14	1	59	18	8	0	19	1	3	15	1	6	3	6	52	8	36	9	18
13	Sun	2	44	3	25	20	3	1	52	2	35	16	3	7	36	8	14	10	2	10	46
14	Mo	4	10	4	47	23	4	3	17	3	51	18	5	8	51	9	20	11	26	..	..
15	Tu	5	20	5	48	26	11	4	22	4	49	20	10	9	45	10	8	0	4	0	34
16	Wd	6	17	6	41	30	1	5	18	5	45	23	0	10	32	10	56	1	0	1	25
17	Th	7	7	7	30	31	5	6	8	6	29	24	1	11	18	11	40	1	50	2	13
18	Fri	7	51	8	11	33	2	6	49	7	10	25	2	12	0	..	..	2	34	2	55
19	Sat	8	32	8	54	33	10	7	31	7	53	25	9	0	21	0	42	3	15	3	35
20	Sun	9	15	9	35	33	4	8	15	8	38	25	4	1	5	1	27	3	55	4	17
21	Mo	9	54	10	13	31	5	8	59	9	20	24	1	1	49	2	9	4	39	5	1
22	Tu	10	31	10	48	28	5	9	40	10	0	22	0	2	31	2	51	5	22	5	44
23	Wd	11	9	11	31	25	4	10	23	10	46	19	9	3	13	3	38	6	6	6	29
24	Th	11	59	..	..	21	10	11	12	11	42	17	3	4	5	4	37	6	55	7	22
25	Fri	0	33	1	15	19	2	..	..	0	20	15	5	5	17	6	4	7	54	8	33
26	Sat	2	0	2	45	19	0	1	4	1	53	15	4	6	53	7	37	9	19	10	3
27	Sun	3	29	4	13	21	0	2	39	3	20	16	9	8	17	8	53	10	47	11	29
28	Mo	4	49	5	21	23	4	3	52	4	23	18	5	9	21	9	46	..	..	0	6
29	Tu	5	44	6	8	25	8	4	45	5	9	20	0	10	5	10	25	0	35	1	1
30	Wd	6	29	6	49	27	4	5	30	5	50	21	2	10	42	11	1	1	21	1	42
31	Th	7	7	7	25	27	11	6	8	6	24	21	7	11	18	11	34	2	0	2	17

The above are in Greenwich Mean Time, if local time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 1st, 1h. 58m. a.m. | Last Quarter. 22nd, 4h. 25m. p.m.
 First Quarter. 9th, 4h. 26m. a.m. | New Moon .. 30th, 6h. 37m. p.m.
 Full Moon .. 15th, 10h. 26m. p.m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgewater.					Bristol.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H.	M.	H.	M.	F.	H.	M.	H.	M.	F.	H.	M.	H.	M.	F.
1	Friday ..	6	4	6	20	26	8	1	8	16	14	7	41	7	56	28
2	Saturday..	6	34	6	50	27	8	30	8	46	14	8	10	8	26	23
3	Sunday ..	7	4	7	18	27	9	0	9	14	14	8	40	8	54	28
4	Monday..	7	33	7	48	26	9	28	9	41	14	9	8	9	21	27
5	Tuesday..	8	4	8	18	25	9	56	10	9	13	9	36	9	49	26
6	Wednesday	8	36	8	53	24	10	25	10	40	12	10	5	10	20	24
7	Thursday.	9	9	9	30	23	10	55	11	12	10	10	35	10	52	22
8	Friday ..	9	53	10	19	22	11	33	11	59	9	11	13	11	39	20
9	Saturday..	10	46	11	17	21	..	0	29	7	11	..	0	9	18	9
10	Sunday ..	11	55	..	21	5	1	4	1	46	7	0	44	1	26	18
11	Monday..	0	43	1	29	22	2	33	3	15	8	2	13	2	55	20
12	Tuesday..	2	10	2	46	24	3	56	4	34	11	3	36	4	14	23
13	Wednesday	3	16	3	45	26	5	7	5	38	13	4	47	5	18	27
14	Thursday.	4	11	4	35	27	6	5	6	29	15	5	45	6	9	30
15	Friday ..	5	59	5	24	29	6	54	7	19	17	6	34	6	59	32
16	Saturday..	5	48	6	10	29	7	44	8	7	18	7	24	7	47	33
17	Sunday ..	6	33	6	54	29	8	29	8	50	18	8	9	8	30	33
18	Monday..	7	16	7	39	29	9	12	9	34	17	8	52	9	14	32
19	Tuesday..	8	3	8	24	28	9	55	10	14	16	9	35	9	54	30
20	Wednesday	8	46	9	9	26	10	34	10	54	14	10	14	10	34	27
21	Thursday.	9	33	9	57	24	11	14	11	37	12	10	54	11	17	24
22	Friday ..	10	23	10	51	22	..	0	3	9	8	11	43	..	21	3
23	Saturday..	11	25	..	21	9	0	36	1	13	8	0	16	0	53	19
24	Sunday ..	0	5	0	48	21	1	57	2	38	7	1	37	2	18	18
25	Monday..	1	30	2	8	22	3	16	3	54	8	2	56	3	34	20
26	Tuesday..	2	41	3	11	23	4	29	5	1	10	4	9	4	41	22
27	Wednesday	3	35	3	58	24	5	27	5	51	11	5	7	5	31	24
28	Thursday.	4	19	4	39	25	6	13	6	33	13	5	53	6	13	26
29	Friday ..	4	57	5	13	26	6	51	7	8	13	6	31	6	48	27
30	Saturday..	5	30	5	46	26	7	24	7	42	14	7	4	7	22	27

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 1st, 1h. 58m. a.m. | Last Quarter. 22nd, 4h. 25m. p.m.
 First Quarter. 9th, 4h. 26m. a.m. | New Moon .. 30th, 6h. 37m. p.m.
 Full Moon .. 15th, 10h. 26m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.						Cardiff.						Gloucester.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	6	39	6	55	21	2	7	33	7	48	29	5	8	26	8	41	27	3
2	Saturday..	7	9	7	25	21	5	8	2	8	18	29	8	8	55	9	11	27	7
3	Sunday ..	7	39	7	53	21	3	8	32	8	46	29	6	9	25	9	39	27	5
4	Monday...	8	8	8	23	20	8	9	0	9	13	28	9	9	53	10	6	26	5
5	Tuesday..	8	39	8	53	19	9	9	28	9	41	27	6	10	21	10	34	24	11
6	Wednesday	9	11	9	28	18	7	9	57	10	12	26	1	10	50	11	5	23	1
7	Thursday.	9	44	10	5	17	3	10	27	10	44	24	5	11	20	11	37	21	0
8	Friday ..	10	28	10	54	15	9	11	5	11	31	22	7	11	58	..	18	9	
9	Saturday..	11	21	11	52	14	5	..	0	1	21	0	0	0	24	0	54	16	9
10	Sunday ..	..	0	30	14	3	0	0	36	1	18	20	9	1	29	2	11	16	5
11	Monday..	1	18	2	4	15	5	2	5	2	47	22	3	2	58	3	40	18	4
12	Tuesday..	2	45	3	21	17	8	3	28	4	6	24	11	4	21	4	59	21	7
13	Wednesday	3	51	4	20	20	2	4	39	5	10	28	1	5	32	6	3	25	7
14	Thursday.	4	46	5	10	22	4	5	37	6	1	30	10	6	30	6	51	29	1
15	Friday ..	5	34	5	59	23	11	6	26	6	51	32	9	7	19	7	44	31	5
16	Saturday..	6	23	6	45	24	6	7	16	7	39	33	6	8	9	8	32	32	4
17	Sunday ..	7	8	7	29	24	9	8	1	8	22	33	9	8	54	9	15	32	8
18	Monday..	7	51	8	14	24	1	8	44	9	6	33	0	9	37	9	59	31	9
19	Tuesday..	8	38	8	59	22	8	9	27	9	46	31	3	10	20	10	39	29	7
20	Wednesday	9	21	9	44	20	8	10	6	10	26	28	9	10	59	11	19	26	5
21	Thursday.	10	8	10	32	18	6	10	46	11	9	26	0	11	39	..	23	0	
22	Friday ..	10	58	11	26	16	2	11	35	..	23	2	0	0	2	0	28	19	5
23	Saturday..	12	0	..	14	8	0	0	8	0	45	21	3	1	1	1	38	17	1
24	Sunday ..	0	40	1	23	14	4	1	29	2	10	20	10	2	22	3	3	16	7
25	Monday..	2	5	2	43	15	5	2	48	3	26	22	3	3	41	4	19	18	4
26	Tuesday..	3	16	3	46	16	11	4	1	4	33	24	0	4	54	5	26	20	6
27	Wednesday	4	10	4	33	18	4	4	59	5	23	25	10	5	52	6	16	22	9
28	Thursday.	4	54	5	14	19	6	5	45	6	5	27	3	6	38	6	58	24	7
29	Friday ..	5	32	5	48	20	4	6	23	6	40	28	4	7	16	7	33	25	11
30	Saturday..	6	5	6	21	20	7	6	56	7	14	28	7	7	49	8	7	26	3

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 1st, 1h. 58m. a.m. | Last Quarter. 22nd, 4h. 25m. p.m.
 First Quarter. 9th, 4h. 26m. a.m. | New Moon .. 30th, 6h. 37m. p.m.
 Full Moon .. 15th, 10h. 26m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	6	14	6	30	20	8	6	49	7	5	21	2
2	Saturday..	6	44	7	0	20	10	7	19	7	35	21	4
3	Sunday ..	7	14	7	28	20	9	7	49	8	3	21	3
4	Monday..	7	43	7	58	20	2	8	18	8	33	20	8
5	Tuesday..	8	14	8	28	19	5	8	49	9	3	19	11
6	Wednesdy	8	46	9	3	18	5	9	21	9	38	18	11
7	Thursday.	9	19	9	40	17	3	9	54	10	15	17	9
8	Friday ..	10	3	10	29	15	11	10	38	11	4	16	5
9	Saturday..	10	56	11	27	14	9	11	31	..	15	3	3
10	Sunday ..	..	0	5	14	7	7	0	2	0	40	15	1
11	Monday..	0	53	1	39	15	8	1	28	2	14	16	2
12	Tuesday..	2	20	2	56	17	7	2	55	3	31	18	1
13	Wednesdy	3	26	3	55	19	9	4	1	4	30	20	3
14	Thursday.	4	21	4	45	21	8	4	56	5	20	22	2
15	Friday ..	5	9	5	34	23	0	5	44	6	9	23	6
16	Saturday..	5	58	6	20	23	7	6	33	6	55	24	1
17	Sunday ..	6	43	7	4	23	9	7	18	7	39	24	3
18	Monday..	7	26	7	49	23	2	8	1	8	24	23	8
19	Tuesday..	8	13	8	34	21	11	8	48	9	9	22	5
20	Wednesdy	8	56	9	19	20	2	9	31	9	54	20	8
21	Thursday.	9	43	10	7	18	4	10	18	10	42	18	10
22	Friday ..	10	33	11	1	16	3	11	8	11	36	16	9
23	Saturday..	11	35	..	15	0	0	..	0	10	15	6	..
24	Sunday ..	0	15	0	58	14	8	0	50	1	33	15	2
25	Monday..	1	40	2	18	15	8	2	15	2	53	16	2
26	Tuesday..	2	51	3	21	16	11	3	26	3	56	17	5
27	Wednesdy	3	45	4	8	18	2	4	20	4	43	18	8
28	Thursday.	4	29	4	49	19	2	5	4	5	24	19	8
29	Friday ..	5	7	5	23	19	11	5	42	5	58	20	5
30	Saturday..	5	40	5	56	20	1	6	15	6	31	20	7

The above are in Greenwich Mean Time, if local Time be required for
 Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

New Moon .. 1st, 1h. 58m. a.m. | Last Quarter. 22nd, 4h. 25m. p.m.
 First Quarter. 9th, 4h. 26m. a.m. | New Moon .. 30th, 6h. 37m. p.m.
 Full Moon .. 15th, 10h. 26m. p.m.

M. D.	W. D.	Newport.				Swansea.				Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Fri	7 41	7 56	28 9	9	6 39	6 55	22 2	2	11 50	..	..	..	2 34	2 50	..	..
2	Sat	8 10	8 26	29 1	1	7 9	7 25	22 5	5	0 6	0 20	..	..	3 5	3 20	..	..
3	Sun	8 40	8 54	28 11	11	7 39	7 53	22 3	3	0 36	0 51	..	..	3 34	3 49	..	..
4	Mo	9 8	9 21	28 1	1	8 8	8 23	21 8	8	1 5	1 20	..	..	4 3	4 17	..	..
5	Tu	9 36	9 49	26 9	9	8 39	8 53	20 9	9	1 34	1 50	..	..	4 32	4 46	..	..
6	Wd	10 5	10 20	25 0	0	9 11	9 28	19 7	7	2 3	2 21	..	..	5 2	5 16	..	..
7	Th	10 35	10 52	23 1	1	9 44	10 5	18 3	3	2 39	2 56	..	..	5 34	5 53	..	..
8	Fri	11 13	11 39	21 0	0	10 28	10 54	16 9	9	3 18	3 43	..	..	6 11	6 34	..	..
9	Sat	..	0 9	19 2	2	11 21	11 52	15 5	5	4 16	4 50	..	..	7 0	7 32	..	..
10	Sun	0 44	1 26	18 10	10	..	0 30	15 3	3	5 29	6 16	..	..	8 6	8 46	..	..
11	Mo	2 13	2 55	20 7	7	1 18	2 4	16 5	5	7 5	7 47	..	..	9 29	10 15	..	..
12	Tu	3 36	4 14	23 8	8	2 45	3 21	18 8	8	8 23	8 54	..	..	10 57	11 35	..	..
13	Wd	4 47	5 18	27 4	4	3 51	4 20	21 2	2	9 20	9 44	..	..	..	0 7	..	..
14	Th	5 45	6 9	30 6	6	4 46	5 10	23 4	4	10 6	10 25	..	..	0 34	0 59	..	..
15	Fri	6 34	6 59	32 8	8	5 34	5 59	24 11	11	10 47	11 10	..	..	1 22	1 43	..	..
16	Sat	7 24	7 47	33 7	7	6 23	6 45	25 6	6	11 33	11 56	..	..	2 4	2 26	..	..
17	Sun	8 9	8 30	33 10	10	7 8	7 29	25 9	9	..	0 19	..	..	2 49	3 11	..	..
18	Mo	8 52	9 14	33 0	0	7 51	8 14	25 1	1	0 40	1 3	..	..	3 33	3 53	..	..
19	Tu	9 35	9 54	30 11	11	8 38	8 59	23 8	8	1 26	1 49	..	..	4 15	4 38	..	..
20	Wd	10 14	10 34	28 1	1	9 21	9 44	21 8	8	2 9	2 32	..	..	5 1	5 22	..	..
21	Th	10 54	11 17	24 11	11	10 8	10 32	19 6	6	2 55	3 21	..	..	5 45	6 10	..	..
22	Fri	11 43	..	21 8	8	10 56	11 26	17 2	2	3 48	4 19	..	..	6 37	7 5	..	..
23	Sat	0 16	0 53	19 5	5	12 0	..	15 8	8	4 57	5 39	..	..	7 36	8 13	..	..
24	Sun	1 37	2 18	19 0	0	0 40	1 23	15 4	4	6 28	7 11	..	..	8 56	9 40	..	..
25	Mo	2 56	3 34	20 7	7	2 5	2 43	16 5	5	7 48	8 21	..	..	10 20	10 58	..	..
26	Tu	4 9	4 41	22 8	8	3 16	3 46	17 11	11	8 50	9 15	..	..	11 33	..	..	..
27	Wd	5 7	5 31	24 9	9	4 10	4 33	19 4	4	9 35	9 54	..	..	0 3	0 29	..	..
28	Th	5 53	6 13	26 5	5	4 54	5 14	20 6	6	10 12	10 28	..	..	0 50	1 10	..	..
29	Fri	6 31	6 48	27 8	8	5 32	5 48	21 4	4	10 44	11 0	..	..	1 29	1 46	..	..
30	Sat	7 4	7 22	27 11	11	6 5	6 21	21 7	7	11 15	11 31	..	..	2 2	2 16	..	..

The above are in Greenwich Mean Time, if local time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 8th, 3h. 38m. p.m. | Last Quarter. 22nd, 6h. 9m. a.m.
 Full Moon .. 15th, 6h. 3m. a.m. | New Moon .. 30th, 9h. 57m. a.m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgewater.					Bristol.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H. M.	H. M.	F. I.			H. M.	H. M.	F. I.			H. M.	H. M.	F. I.		
1	Sunday ..	6 3	6 20	26 8			8 0	8 16	14 4			7 40	7 56	23 1		
2	Monday..	6 35	6 51	26 7			8 31	8 47	14 3			8 11	8 27	23 0		
3	Tuesday..	7 6	7 22	26 3			9 2	9 17	13 10			8 42	8 57	27 4		
4	Wednesday	7 38	7 56	25 9			9 33	9 49	13 3			9 13	9 29	26 4		
5	Thursday..	8 13	8 33	25 0			10 4	10 22	12 3			9 44	10 2	25 0		
6	Friday ..	8 53	9 14	24 1			10 40	10 59	11 2			10 20	10 39	23 4		
7	Saturday..	9 38	10 2	23 1			11 19	11 42	9 11			10 59	11 22	21 7		
8	Sunday ..	10 29	10 59	22 3			..	0 10	8 10			11 50	..	20 0		
9	Monday..	11 33	..	22 1			0 44	1 22	8 8			0 24	1 2	19 9		
10	Tuesday..	0 11	0 54	22 10			2 3	2 43	9 7			1 43	2 23	21 1		
11	Wednesday	1 34	2 8	24 4			3 21	3 54	11 5			3 1	3 34	23 9		
12	Thursday..	2 39	3 9	26 1			4 26	5 0	13 8			4 6	4 40	27 0		
13	Friday ..	3 37	4 2	27 7			5 30	5 56	15 6			5 10	5 36	29 10		
14	Saturday..	4 29	4 57	28 7			6 23	6 51	16 9			6 3	6 31	31 6		
15	Sunday ..	5 23	5 47	28 11			7 18	7 43	17 2			6 58	7 23	32 2		
16	Monday..	6 11	6 34	29 0			8 8	8 30	17 3			7 48	8 10	32 4		
17	Tuesday..	6 58	7 19	28 6			8 54	9 15	16 8			8 34	8 55	31 4		
18	Wednesday	7 45	8 8	27 6			9 38	10 0	15 5			9 18	9 40	29 8		
19	Thursday..	8 32	8 54	26 3			10 21	10 41	13 10			10 1	10 21	27 4		
20	Friday ..	9 17	9 41	24 8			11 1	11 22	11 10			10 41	11 2	24 4		
21	Saturday..	10 7	10 32	23 4			11 47	..	10 2			11 27	11 54	22 0		
22	Sunday ..	11 0	11 28	22 1			0 14	0 45	8 8			..	0 25	19 9		
23	Monday..	..	0 2	21 8			1 17	1 53	8 0			0 57	1 33	18 10		
24	Tuesday..	0 36	1 12	22 1			2 26	3 0	8 8			2 6	2 40	19 9		
25	Wednesday	1 45	2 16	22 11			3 31	4 2	9 8			3 11	3 42	21 3		
26	Thursday..	2 45	3 12	23 11			4 33	5 2	10 11			4 13	4 42	23 0		
27	Friday ..	3 35	3 57	24 10			5 27	5 50	12 1			5 7	5 30	24 8		
28	Saturday..	4 17	4 39	25 5			6 11	6 33	12 10			5 51	6 13	25 9		
29	Sunday ..	4 58	5 17	25 11			6 53	7 11	13 5			6 33	6 51	26 8		
30	Monday..	5 34	5 51	26 0			7 28	7 47	13 6			7 8	7 27	26 10		
31	Tuesday..	6 9	6 28	26 2			8 6	8 24	13 9			7 46	8 4	27 2		

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 8th, 3h. 38m. p.m. | Last Quarter. 22nd, 6h. 9m. a.m.
 Full Moon .. 15th, 6h. 3m. a.m. | New Moon .. 30th, 9h. 57m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.					Cardiff.					Gloucester.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Sunday ..	6	38	6	55	20	10	7	32	7	48	29	0	8	25	8	41	26	9
2	Monday...	7	10	7	26	20	9	8	3	8	19	28	11	8	56	9	12	26	7
3	Tuesday..	7	41	7	57	20	4	8	34	8	49	28	4	9	27	9	42	25	11
4	Wednesday	8	13	8	31	19	9	9	5	9	21	27	6	9	58	10	14	24	11
5	Thursday.	8	48	9	8	18	9	9	36	9	54	26	5	10	29	10	47	23	6
6	Friday ..	9	28	9	49	17	8	10	12	10	31	24	11	11	5	11	24	21	7
7	Saturday..	10	13	10	37	16	5	10	51	11	14	23	5	11	45	..	19	9	9
8	Sunday ..	11	4	11	34	15	4	11	42	..	22	1	0	7	0	35	18	2	2
9	Monday..	..	..	0	8	15	2	0	16	0	54	21	10	1	9	1	47	17	9
10	Tuesday..	0	46	1	29	16	1	1	35	2	15	23	0	2	28	3	8	19	3
11	Wednesday	2	9	2	43	17	11	2	53	3	26	25	3	3	46	4	19	22	1
12	Thursday.	3	14	3	44	20	2	3	58	4	32	28	1	4	51	5	25	25	7
13	Friday ..	4	12	4	37	22	0	5	2	5	28	30	6	5	55	6	21	28	7
14	Saturday..	5	4	5	32	23	3	5	55	6	23	31	11	6	48	7	16	30	5
15	Sunday ..	5	58	6	22	23	8	6	50	7	15	32	6	7	43	8	8	31	1
16	Monday..	6	46	7	9	23	9	7	40	8	2	32	7	8	33	8	55	21	3
17	Tuesday..	7	33	7	54	23	2	8	26	8	47	31	9	9	19	9	40	30	3
18	Wednesday	8	20	8	43	21	11	9	10	9	32	30	4	10	3	10	25	28	5
19	Thursday.	9	7	9	29	20	4	9	53	10	13	28	4	10	46	11	6	25	11
20	Friday ..	9	52	10	16	18	4	10	33	10	54	25	10	11	26	11	47	22	9
21	Saturday..	10	42	11	7	16	8	11	19	11	46	23	9	..	0	12	20	3	3
22	Sunday ..	11	35	..	..	15	2	..	0	17	21	10	0	0	39	1	10	17	9
23	Monday..	0	3	0	37	14	6	0	49	1	25	21	1	1	42	2	18	16	11
24	Tuesday..	1	11	1	47	15	2	1	58	2	32	21	10	2	51	3	25	17	9
25	Wednesday	2	20	2	51	16	2	3	3	3	34	23	2	3	56	4	27	19	5
26	Thursday.	3	20	3	47	17	5	4	5	4	34	24	8	4	58	5	27	21	4
27	Friday ..	4	10	4	32	18	7	4	59	5	22	26	1	5	52	6	15	23	1
28	Saturday..	4	52	5	14	19	4	5	43	6	5	27	0	6	36	6	58	24	3
29	Sunday ..	5	33	5	52	19	11	6	25	6	43	27	10	7	18	7	36	25	3
30	Monday..	6	9	6	26	20	0	7	0	7	19	28	0	7	53	8	12	25	5
31	Tuesday..	6	44	7	3	20	3	7	38	7	56	28	3	8	31	8	49	25	9

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 8th, 3h. 38m. p.m. | Last Quarter. 22nd, 6h. 9m. a.m.
 Full Moon .. 15th, 6h. 3m. a.m. | New Moon .. 30th, 9h. 57m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	L.
1	Sunday ..	6	13	6	30	20	4	6	48	7	5	20	10
2	Monday..	6	45	7	1	20	3	7	20	7	36	20	9
3	Tuesday..	7	16	7	32	19	11	7	51	8	7	20	5
4	Wednesday	7	48	8	6	19	5	8	23	8	41	19	11
5	Thursday.	8	23	8	43	18	7	8	58	9	18	19	1
6	Friday ..	9	3	9	24	17	7	9	38	9	59	18	1
7	Saturday..	9	48	10	12	16	6	10	23	10	47	17	0
8	Sunday ..	10	39	11	9	15	7	11	14	11	44	16	1
9	Monday..	11	43	..	15	5		..	0	18	15	11	
10	Tuesday..	0	21	1	4	16	2	0	56	1	39	16	8
11	Wednesday	1	44	2	18	17	10	2	19	2	53	18	4
12	Thursday.	2	49	3	19	19	9	3	24	3	54	20	3
13	Friday ..	3	47	4	12	21	5	4	22	4	47	21	11
14	Saturday..	4	39	5	7	22	6	5	14	5	42	23	0
15	Sunday ..	5	33	5	57	22	10	6	8	6	32	23	4
16	Monday..	6	21	6	44	22	11	6	56	7	19	23	5
17	Tuesday..	7	8	7	29	22	5	7	43	8	4	22	11
18	Wednesday	7	55	8	18	21	4	8	30	8	53	21	10
19	Thursday.	8	42	9	4	19	11	9	17	9	39	20	5
20	Friday ..	9	27	9	51	18	2	10	2	10	26	18	8
21	Saturday..	10	17	10	42	16	9	10	52	11	17	17	3
22	Sunday ..	11	10	11	38	15	5	11	45	..	15	11	
23	Monday..	..	0	12	14	10		0	13	0	47	15	4
24	Tuesday..	0	46	1	22	15	5	1	21	1	57	15	11
25	Wednesday	1	55	2	26	16	3	2	30	3	1	16	9
26	Thursday.	2	55	3	22	17	5	3	30	3	57	17	11
27	Friday ..	3	45	4	7	18	5	4	20	4	42	18	11
28	Saturday..	4	27	4	49	19	0	5	2	5	24	19	6
29	Sunday ..	5	8	5	27	19	7	5	43	6	2	20	1
30	Monday..	5	44	6	1	19	8	6	19	6	36	20	2
31	Tuesday..	6	19	6	38	19	10	6	54	7	13	20	4

The above are in Greenwich Mean Time, if local Time be required for
 Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 8th, 3h. 38m. p.m. | Last Quarter. 22nd, 6h. 9m. a.m.
 Full Moon .. 15th, 6h. 3m. a.m. | New Moon .. 30th, 9h. 57m. a.m.

M. D.	W. D.	Newport.						Swansea.						Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Morn.		Even.	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.	H.	M.
1	Sun	7	40	7	56	28	4	6	38	6	55	21	10	11	49	..	2	31	2	47	
2	Mo	8	11	8	27	28	3	7	10	7	26	21	9	0	6	0	21	3	4	3	20
3	Tu	8	42	8	57	27	8	7	41	7	57	21	4	0	37	0	53	3	35	3	50
4	Wd	9	13	9	29	26	9	8	13	8	31	20	9	1	9	1	25	4	5	4	21
5	Th	9	44	10	2	25	4	8	48	9	8	19	9	1	42	1	58	4	37	4	54
6	Fri	10	20	10	39	23	8	9	28	9	49	18	8	2	18	2	38	5	11	5	31
7	Sat	10	59	11	22	22	0	10	13	10	37	17	5	3	1	3	27	5	52	6	16
8	Sun	11	50	..	20	5	11	4	11	34	16	4	3	54	4	28	6	43	7	11	
9	Mo	0	24	1	2	20	1	..	0	8	16	2	5	7	5	49	7	45	8	23	
10	Tu	1	43	2	23	21	6	0	46	1	29	17	1	6	35	7	16	9	6	9	46
11	Wd	3	1	3	34	24	0	2	9	2	43	18	11	7	51	8	21	10	25	11	2
12	Th	4	6	4	40	27	4	3	14	3	44	21	2	8	48	9	14	11	33	..	
13	Fri	5	10	5	36	30	1	4	12	4	37	23	0	9	37	9	58	0	1	0	28
14	Sat	6	3	6	31	31	8	5	4	5	32	24	3	10	21	10	44	0	52	1	14
15	Sun	6	58	7	23	32	4	5	58	6	22	24	8	11	9	11	32	1	38	2	2
16	Mo	7	48	8	10	32	6	6	46	7	9	24	9	11	57	..	2	25	2	48	
17	Tu	8	34	8	55	31	6	7	33	7	54	24	2	0	20	0	44	3	12	3	34
18	Wd	9	18	9	40	29	11	8	20	8	43	22	11	1	6	1	31	3	57	4	18
19	Th	10	1	10	21	27	8	9	7	9	29	21	4	1	53	2	17	4	43	5	6
20	Fri	10	41	11	2	24	9	9	52	10	16	19	4	2	40	3	4	5	30	5	54
21	Sat	11	27	11	54	22	5	10	42	11	7	17	8	3	31	4	0	6	19	6	47
22	Sun	..	0	25	20	1	11	35	..	16	2	4	32	5	8	7	17	7	17	7	49
23	Mo	0	57	1	33	19	3	0	3	0	37	15	6	5	43	6	23	8	24	9	0
24	Tu	2	6	2	40	20	1	1	11	1	47	16	2	6	59	7	33	9	36	10	9
25	Wd	3	11	3	42	21	8	2	20	2	51	17	2	8	1	8	28	10	42	11	12
26	Th	4	13	4	42	23	4	3	20	3	47	18	5	8	53	9	16	11	40	..	
27	Fri	5	7	5	30	25	0	4	10	4	32	19	7	9	35	9	53	0	6	0	30
28	Sat	5	51	6	13	26	1	4	52	5	14	20	4	10	10	10	28	0	50	1	9
29	Sun	6	33	6	51	27	1	5	33	5	52	20	11	10	46	11	3	1	27	1	46
30	Mo	7	8	7	27	27	3	6	9	6	26	21	0	11	19	11	36	2	3	2	19
31	Tu	7	46	8	4	27	6	6	44	7	3	21	3	11	55	..	2	35	2	52	

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 16m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 6th, 11h. 16m. p.m. | Last Quarter. 20th, 9h. 34m. p.m.
 Full Moon .. 13th, 1h. 47m. p.m. | New Moon .. 28th, 11h. 33m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.					Llanelly.					Milford Haven.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H.	M.	H.	M.	F.	H.	M.	H.	M.	F.	H.	M.	H.	M.	F.
1	Wednesday	6	55	7	12	19	9	7	30	7	47	20	3	7	30	7
2	Thursday	7	30	7	50	19	6	8	5	8	25	20	0	8	5	8
3	Friday ..	8	10	8	30	18	11	8	45	9	5	19	5	8	45	9
4	Saturday	8	51	9	13	18	4	9	26	9	48	18	10	9	26	9
5	Sunday ..	9	35	10	0	17	7	10	10	10	35	18	1	10	10	10
6	Monday..	10	25	10	52	16	10	11	0	11	27	17	4	11	0	11
7	Tuesday..	11	22	11	54	16	6	11	57	..	17	0	11	57	..	16
8	Wednesday	..	0	28	16	10	10	0	29	1	3	17	4	0	29	1
9	Thursday	1	3	1	36	17	10	1	38	2	11	18	4	1	38	2
10	Friday ..	2	10	2	45	19	2	2	45	3	20	19	8	2	45	3
11	Saturday	3	17	3	47	20	6	3	52	4	22	21	0	3	52	4
12	Sunday ..	4	18	4	45	21	5	4	53	5	20	21	11	4	53	5
13	Monday..	5	13	5	43	21	9	5	48	6	18	22	3	5	48	6
14	Tuesday..	6	7	6	30	21	11	6	42	7	5	22	5	6	42	7
15	Wednesday	6	55	7	17	21	8	7	30	7	52	22	2	7	30	7
16	Thursday	7	40	8	4	20	10	8	15	8	39	21	4	8	15	8
17	Friday ..	8	28	8	49	19	10	9	3	9	24	20	4	9	3	9
18	Saturday	9	10	9	31	18	8	9	45	10	6	19	2	9	45	10
19	Sunday ..	9	54	10	14	17	6	10	29	10	49	18	0	10	29	10
20	Monday..	10	37	10	57	16	4	11	12	11	32	16	10	11	12	11
21	Tuesday..	11	22	11	49	15	6	11	57	..	16	0	11	57	..	15
22	Wednesday	..	0	19	15	2	2	0	24	0	54	15	8	0	24	0
23	Thursday	0	50	1	23	15	6	1	25	1	58	16	0	1	25	1
24	Friday ..	1	57	2	27	16	1	2	32	3	2	16	7	2	32	3
25	Saturday..	2	56	3	23	17	1	3	31	3	58	17	7	3	31	3
26	Sunday ..	3	48	4	11	18	0	4	23	4	46	18	6	4	23	4
27	Monday..	4	33	4	57	18	9	5	8	5	32	19	3	5	8	5
28	Tuesday..	5	19	5	41	19	0	5	54	6	16	19	6	5	54	6
29	Wednesday	6	1	6	19	19	7	6	36	6	54	20	1	6	36	6
30	Thursday	6	40	6	59	19	11	7	15	7	34	20	5	7	15	7

The above are in Greenwich Mean Time, if local Time be required for
 Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 6th, 11h. 16m. p.m. | Last Quarter. 20th, 9h. 34m. p.m.
 Full Moon .. 13th, 1h. 47m. p.m. | New Moon .. 28th, 11h. 33m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Wednesday	7	20	7	37	20	2	8	13	8	30	28	1
2	Thursday	7	55	8	15	19	10	8	48	9	7	27	8
3	Friday ..	8	35	8	55	19	2	9	25	9	43	26	11
4	Saturday..	9	16	9	38	18	6	10	1	10	21	26	0
5	Sunday ..	10	0	10	25	17	8	10	40	11	2	24	11
6	Monday..	10	50	11	17	16	10	11	27	11	58	23	11
7	Tuesday..	11	47	..	16	5	..	..	0	31	23	5	0
8	Wednesday	0	19	0	53	16	10	1	6	1	42	23	11
9	Thursday	1	28	2	1	17	11	2	14	2	45	25	3
10	Friday ..	2	35	3	10	19	6	3	17	3	53	27	3
11	Saturday	3	42	4	12	21	0	4	29	5	2	29	1
12	Sunday ..	4	43	5	10	22	0	5	33	6	1	30	6
13	Monday..	5	38	6	8	22	5	6	29	6	59	31	0
14	Tuesday..	6	32	6	55	22	8	7	26	7	48	31	3
15	Wednesday	7	20	7	42	22	4	8	13	8	35	30	10
16	Thursday	8	5	8	29	21	5	8	57	9	19	29	8
17	Friday ..	8	53	9	14	20	3	9	41	9	59	28	3
18	Saturday..	9	35	9	56	18	11	10	18	10	37	26	6
19	Sunday ..	10	19	10	39	17	6	10	57	11	16	24	10
20	Monday..	11	2	11	22	16	3	11	39	..	23	3	0
21	Tuesday..	11	47	..	15	3	0	0	3	0	31	22	0
22	Wednesday	0	14	0	44	14	11	1	0	1	33	21	6
23	Thursday	1	15	1	48	15	3	2	2	2	33	22	0
24	Friday ..	2	22	2	52	16	0	3	5	3	35	22	10
25	Saturday..	3	21	3	48	17	1	4	6	4	36	24	3
26	Sunday ..	4	13	4	36	18	2	5	3	5	27	25	6
27	Monday..	4	58	5	22	19	0	5	50	6	13	26	7
28	Tuesday ..	5	44	6	6	19	4	6	35	6	57	27	0
29	Wednesday	6	26	6	44	19	11	7	19	7	38	27	10
30	Thursday	7	5	7	24	20	4	7	58	8	17	28	4
		8	51	9	10	25	11						

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 6th, 4h. 30m. a.m. | Last Quarter. 20th, 2h. 17m. p.m.
 Full Moon .. 12th, 10h. 35m. p.m. | New Moon .. 28th, 11h. 18m. a.m.

M. D.	WEEK DAYS.	Barnstaple.				Bridgewater.				Bristol.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	P.	I.	H.	M.	H.	M.	P.	I.
1	Friday ..	7	8	7	28	26	4	9	4	9	23	13	11
2	Saturday..	7	50	8	12	26	2	9	43	10	3	13	9
3	Sunday ..	8	34	8	55	25	10	10	23	10	42	13	4
4	Monday..	9	17	9	40	25	3	11	1	11	22	12	7
5	Tuesday..	10	4	10	27	24	8	11	44	..	..	11	10
6	Wednesday	10	51	11	18	24	0	0	7	0	36	11	0
7	Thursday.	11	47	..	..	23	8	1	5	1	37	10	7
8	Friday ..	0	19	0	56	23	10	2	11	2	45	10	10
9	Saturday..	1	32	2	8	24	7	3	18	3	54	11	9
10	Sunday ..	2	45	3	18	25	6	4	33	5	10	12	11
11	Monday..	3	51	4	23	26	5	5	45	6	18	14	1
12	Tuesday..	4	54	5	20	27	0	6	48	7	14	14	9
13	Wednesday	5	46	6	9	27	3	7	42	8	6	15	1
14	Thursday.	6	34	6	56	27	3	8	30	8	52	15	1
15	Friday ..	7	16	7	37	27	0	9	12	9	32	14	9
16	Saturday..	7	59	8	19	26	6	9	52	10	10	14	2
17	Sunday ..	8	37	8	55	25	9	10	26	10	42	13	3
18	Monday..	9	15	9	81	24	10	10	59	11	13	12	1
19	Tuesday..	9	49	10	9	23	11	11	30	11	48	10	11
20	Wednesday	10	27	10	46	23	0	..	..	0	8	9	9
21	Thursday.	11	9	11	36	22	0	0	29	0	56	8	6
22	Friday ..	..	..	0	7	21	7	1	25	1	59	7	11
23	Saturday..	0	40	1	15	21	8	2	30	3	2	8	0
24	Sunday ..	1	48	2	24	22	5	3	34	4	10	9	1
25	Monday..	2	57	3	29	23	6	4	46	5	21	10	5
26	Tuesday..	3	57	4	21	24	7	5	50	6	15	11	9
27	Wednesday	4	47	5	12	25	7	6	41	7	7	13	0
28	Thursday.	5	35	5	55	26	0	7	30	7	51	13	6
29	Friday ..	6	16	6	36	26	10	8	12	8	32	14	7
30	Saturday..	6	56	7	15	27	3	8	52	9	11	15	1
31	Sunday ..	7	34	7	56	27	4	9	29	9	49	15	2

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 6th, 4h. 30m. a.m. | Last Quarter. 20th, 2h. 17m. p.m.
 Full Moon .. 12th, 10h. 35m. p.m. | New Moon .. 28th, 11h. 18m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	7	43	8	5	20	5	8	36	8	55	28	6
2	Saturday..	8	25	8	47	20	3	9	15	9	35	28	3
3	Sunday ..	9	9	9	30	19	10	9	55	10	14	27	8
4	Monday ..	9	52	10	15	19	1	10	33	10	54	23	9
5	Tuesday..	10	39	11	2	18	4	11	16	11	39	25	10
6	Wednesday	11	26	11	53	17	6	..	0	8	24	10	0
7	Thursday.	..	0	22	17	1	1	0	37	1	9	24	3
8	Friday ..	0	54	1	31	17	4	1	43	2	17	24	6
9	Saturday..	2	7	2	43	18	3	2	50	3	26	25	8
10	Sunday ..	3	20	3	53	19	5	4	5	4	42	27	2
11	Monday..	4	26	4	58	20	7	5	17	5	50	28	7
12	Tuesday..	5	29	5	55	21	3	6	20	6	46	29	6
13	Wednesday	6	21	6	44	21	7	7	14	7	38	29	11
14	Thursday.	7	9	7	31	21	7	8	2	8	24	29	11
15	Friday ..	7	51	8	12	21	3	8	44	9	4	29	6
16	Saturday..	8	34	8	54	20	8	9	24	9	42	28	9
17	Sunday ..	9	12	9	30	19	9	9	58	10	14	27	6
18	Monday..	9	50	10	6	18	7	10	31	10	45	26	1
19	Tuesday..	10	24	10	44	17	5	11	2	11	20	24	8
20	Wednesday	11	2	11	21	16	3	11	40	..	23	3	0
21	Thursday.	11	44	..	15	0	0	0	1	0	28	21	8
22	Friday ..	0	11	0	42	14	5	0	57	1	31	21	0
23	Saturday..	1	15	1	50	14	6	2	2	2	34	21	1
24	Sunday ..	2	23	2	59	15	7	3	6	3	42	22	4
25	Monday ..	3	32	4	4	16	11	4	18	4	53	24	0
26	Tuesday..	4	32	4	56	18	3	5	22	5	47	25	8
27	Wednesday	5	22	5	47	19	6	6	13	6	39	27	3
28	Thursday.	6	10	6	30	20	0	7	2	7	23	28	0
29	Friday ..	6	51	7	11	21	1	7	44	8	4	29	3
30	Saturday..	7	31	7	50	21	7	8	24	8	43	29	11
31	Sunday ..	8	9	8	31	21	8	9	1	9	21	30	0
		9	54	10	14	28	1						

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.
 For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 6th, 4h. 30m. a.m. | Last Quarter. 20th, 2h. 17m. p.m.
 Full Moon .. 12th, 10h. 35m. p.m. | New Moon .. 28th, 11h. 18m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Friday ..	7	18	7	38	20	0	7	53	8	13	20	6
2	Saturday..	7	59	8	22	19	10	8	35	8	57	20	4
3	Sunday ..	8	44	9	5	19	6	9	19	9	40	20	0
4	Monday..	9	27	9	50	18	10	10	2	10	25	19	4
5	Tuesday..	10	14	10	37	18	2	10	49	11	12	18	8
6	Wednesday	11	1	11	28	17	6	11	36	..	..	18	0
7	Thursday.	11	57	..	..	17	1	0	3	0	32	17	7
8	Friday ..	0	29	1	6	17	4	1	4	1	41	17	10
9	Saturday..	1	42	2	18	18	1	2	17	2	53	18	7
10	Sunday ..	2	55	3	28	19	1	3	30	4	3	19	7
11	Monday..	4	1	4	33	20	1	4	36	5	8	20	7
12	Tuesday..	5	4	5	30	20	9	5	39	6	5	21	3
13	Wednesday	5	56	6	19	21	0	6	31	6	54	21	6
14	Thursday.	6	44	7	6	21	0	7	19	7	41	21	6
15	Friday ..	7	26	7	47	20	9	8	1	8	22	21	3
16	Saturday..	8	9	8	29	20	2	8	44	9	4	20	8
17	Sunday ..	8	47	9	5	19	5	9	22	9	40	19	11
18	Monday..	9	25	9	41	18	5	10	0	10	16	18	11
19	Tuesday..	9	59	10	19	17	5	10	34	10	54	17	11
20	Wednesday	10	37	10	56	16	4	11	12	11	31	16	10
21	Thursday.	11	19	11	46	15	3	11	54	..	..	15	9
22	Friday ..	..	..	0	17	14	9	0	21	0	52	15	3
23	Saturday..	0	50	1	25	14	10	1	25	2	0	15	4
24	Sunday ..	1	58	2	34	15	9	2	33	3	9	15	3
25	Monday..	3	7	3	39	16	11	3	42	4	14	17	5
26	Tuesday..	4	7	4	31	18	1	4	42	5	6	18	7
27	Wednesday	4	57	5	22	19	2	5	32	5	57	19	8
28	Thursday.	5	45	6	5	19	8	6	20	6	40	20	2
29	Friday ..	6	26	6	46	20	7	7	1	7	21	21	1
30	Saturday..	7	6	7	25	21	0	7	41	8	0	21	6
31	Sunday ..	7	44	8	6	21	1	8	19	8	41	21	7

The above are in Greenwich Mean Time, if local Time be required for
 Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 6th, 4h. 30m. a.m. | Last Quarter. 20th, 2h. 17m. p.m.
 Full Moon .. 12th, 10h. 35m. p.m. | New Moon .. 28th, 11h. 18m. a.m.

M. D.	W. D.	Newport.				Swansea.				Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.
1	Fri	8	44	9	3	27	10	7	43	8	3	21	5	0	35	0	55
2	Sat	9	23	9	43	27	6	8	25	8	47	21	3	1	15	1	36
3	Sun	10	3	10	22	26	11	9	9	9	30	20	10	1	57	2	19
4	Mo	10	41	11	2	25	10	9	52	10	15	20	1	2	41	3	4
5	Tu	11	24	11	47	24	9	10	39	11	2	19	4	3	30	3	56
6	Wd	..	0	16	23	6	11	11	26	11	53	18	6	4	24	4	57
7	Th	0	45	1	17	22	11	..	0	22	18	1	5	30	6	6	8
8	Fri	1	51	2	25	23	2	0	54	1	31	18	4	6	44	7	18
9	Sat	2	58	3	34	24	6	2	7	2	43	19	3	7	49	8	21
10	Sun	4	13	4	50	26	3	3	20	3	53	20	5	8	53	9	22
11	Mo	5	25	5	58	27	11	4	26	4	58	21	7	9	50	10	16
12	Tu	6	28	6	54	28	11	5	29	5	55	22	3	10	41	11	6
13	Wd	7	22	7	46	29	5	6	21	6	41	22	7	11	31	11	55
14	Th	8	10	8	32	29	5	7	9	7	31	22	7	..	0	20	2
15	Fri	8	52	9	12	28	11	7	51	8	12	22	3	0	42	1	3
16	Sat	9	32	9	50	28	1	8	34	8	54	21	8	1	24	1	45
17	Sun	10	6	10	22	26	9	9	12	9	30	20	9	2	4	2	22
18	Mo	10	39	10	53	25	0	9	50	10	6	19	7	2	41	3	2
19	Tu	11	10	11	28	23	4	10	24	10	44	18	5	3	19	3	39
20	Wd	11	48	..	21	10	11	11	2	11	21	17	3	4	2	4	25
21	Th	0	9	0	36	19	11	11	44	..	16	0	4	50	5	20	7
22	Fri	1	5	1	39	19	2	0	11	0	42	15	5	5	52	6	30
23	Sat	2	10	2	42	19	3	1	15	1	50	15	6	7	3	7	35
24	Sun	3	14	3	50	20	9	2	23	2	59	16	7	8	3	8	34
25	Mo	4	26	5	1	22	8	3	32	4	4	17	11	9	3	9	31
26	Tu	5	30	5	55	24	6	4	32	4	56	19	3	9	53	10	14
27	Wd	6	21	6	47	26	5	5	22	5	47	20	6	10	35	10	59
28	Th	7	10	7	31	27	3	6	10	6	30	21	0	11	20	11	41
29	Fri	7	52	8	12	28	7	6	51	7	11	22	1	..	0	2	2
30	Sat	8	32	8	51	29	5	7	31	7	50	22	7	0	22	0	42
31	Sun	9	9	9	29	29	7	8	9	8	31	22	8	1	2	1	21

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 4th, 8h. 52m. a.m. | Last Quarter. 19th, 7h. 50m. a.m.
 Full Moon .. 11th, 9h. 13m. a.m. | New Moon .. 26th, 9h. 26m. p.m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgewater.					Bristol.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H.	M.	H.	M.	F.	H.	M.	H.	M.	F.	H.	M.	H.	M.	F.
1	Monday..	8	18	8	40	27	10	9	10	28	15	9	49	10	8	29
2	Tuesday..	8	59	9	21	26	10	46	11	5	14	10	26	10	45	23
3	Wednesday	9	43	10	5	25	11	24	11	45	13	11	4	11	25	26
4	Thursday..	10	29	10	52	24	..	0	9	11	10	11	49	..	..	24
5	Friday ..	11	19	11	53	23	0	36	1	6	10	0	16	0	46	22
6	Saturday..	..	0	32	23	0	1	43	2	22	9	1	23	2	2	21
7	Sunday ..	1	12	1	56	23	3	0	3	41	10	2	40	3	21	22
8	Monday..	2	36	3	12	24	4	23	5	2	11	4	3	4	42	23
9	Tuesday..	3	48	4	19	25	5	41	6	13	12	5	21	5	53	25
10	Wednesday	4	48	5	13	26	6	42	7	8	14	6	22	6	48	27
11	Thursday..	5	37	5	58	26	7	32	7	55	14	7	12	7	35	28
12	Friday ..	6	19	6	39	27	8	15	8	35	15	7	55	8	15	29
13	Saturday..	6	55	7	13	27	8	51	9	9	15	8	31	8	49	29
14	Sunday ..	7	31	7	49	26	9	26	9	42	14	9	6	9	22	28
15	Monday..	8	6	8	22	26	9	58	10	13	14	9	38	9	53	27
16	Tuesday..	8	41	8	56	25	10	29	10	43	13	10	9	10	23	26
17	Wednesday	9	11	9	27	24	10	56	11	10	11	10	36	10	50	24
18	Thursday..	9	45	10	2	23	11	26	11	42	10	11	6	11	22	22
19	Friday ..	10	21	10	42	22	..	0	1	8	11	11	41	..	..	20
20	Saturday..	11	11	11	42	21	0	25	0	58	7	0	5	0	38	18
21	Sunday ..	..	0	15	21	1	1	31	2	7	7	1	11	1	47	17
22	Monday..	0	58	1	42	21	2	47	3	28	7	2	27	3	8	18
23	Tuesday..	2	20	2	57	22	4	6	4	46	9	3	46	4	26	20
24	Wednesday	3	28	3	58	24	5	20	5	51	11	5	0	5	31	23
25	Thursday..	4	24	4	49	25	6	19	6	43	13	5	59	6	23	26
26	Friday ..	5	12	5	36	26	7	7	7	31	14	6	47	7	11	28
27	Saturday..	5	54	6	13	27	7	50	8	10	15	7	30	7	50	30
28	Sunday ..	6	35	6	55	28	8	31	8	51	16	8	11	8	31	31
29	Monday..	7	15	7	37	28	9	11	9	32	16	8	51	9	12	31
30	Tuesday..	7	58	8	20	28	9	51	10	11	16	9	31	9	51	31
31	Wednesday	8	42	9	0	27	10	30	10	47	15	10	10	10	27	29

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 4th, 8h. 52m. a.m. | Last Quarter. 19th, 7h. 50m. a.m.
 Full Moon .. 11th, 9h. 13m. a.m. | New Moon .. 26th, 9h. 26m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.						Cardiff.						Gloucester.					
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Monday...	8	53	9	15	21	6	9	41	10	0	29	9	10	34	10	53	27	9
2	Tuesday..	9	34	9	56	20	9	10	18	10	37	28	11	11	11	11	30	26	7
3	Wednesday	10	18	10	40	19	9	10	56	11	17	27	6	11	49	..	..	24	11
4	Thursday	11	4	11	27	18	4	11	41	..	..	25	10	0	10	0	34	22	9
5	Friday ..	11	54	..	..	17	0	0	8	0	38	24	2	1	1	1	31	20	8
6	Saturday.	0	28	1	7	16	3	1	15	1	54	23	3	2	8	2	47	19	7
7	Sunday ..	1	47	2	31	16	8	2	32	3	13	23	9	3	25	4	6	20	3
8	Monday..	3	11	3	47	17	11	3	55	4	34	25	3	4	48	5	27	22	1
9	Tuesday..	4	23	4	54	19	5	5	13	5	45	27	2	6	6	6	38	24	5
10	Wednesday	5	23	5	48	20	7	6	14	6	40	28	7	7	7	7	33	26	3
11	Thursday.	6	12	6	33	21	1	7	4	7	27	29	3	7	57	8	20	27	1
12	Friday ..	6	54	7	14	21	6	7	47	8	7	29	9	8	40	9	0	27	9
13	Saturday.	7	30	7	48	21	7	8	23	8	41	29	11	9	16	9	34	27	11
14	Sunday ..	8	6	8	24	21	2	8	58	9	14	29	5	9	51	10	7	27	3
15	Monday..	8	41	8	57	20	7	9	30	9	45	28	7	10	23	10	38	26	3
16	Tuesday..	9	16	9	31	19	7	10	1	10	15	27	5	10	54	11	8	24	9
17	Wednesday	9	46	10	2	18	3	10	28	10	42	25	8	11	21	11	35	22	7
18	Thursday.	10	20	10	37	17	0	10	58	11	14	24	2	11	51	..	..	20	8
19	Friday ..	10	56	11	17	15	5	11	33	11	57	22	3	0	7	0	26	18	4
20	Saturday..	11	46	..	..	14	1	..	..	0	30	20	7	0	50	1	23	16	3
21	Sunday ..	0	17	0	50	13	10	1	3	1	39	20	3	1	56	2	32	15	10
22	Monday..	1	33	2	17	14	4	2	19	3	0	20	10	3	12	3	53	16	7
23	Tuesday..	2	55	3	32	16	0	3	38	4	18	22	10	4	31	5	11	19	1
24	Wednesday	4	3	4	33	18	1	4	52	5	23	25	5	5	45	6	16	22	3
25	Thursday.	4	59	5	24	19	11	5	51	6	15	27	10	6	44	7	8	25	3
26	Friday ..	5	47	6	11	20	9	6	39	7	3	28	11	7	32	7	56	26	7
27	Saturday..	6	29	6	48	22	3	7	22	7	42	30	9	8	15	8	35	28	11
28	Sunday ..	7	10	7	30	23	2	8	3	8	23	31	9	8	56	9	16	30	3
29	Monday..	7	50	8	12	23	4	8	43	9	4	32	0	9	36	9	57	30	7
30	Tuesday ..	8	33	8	55	22	11	9	23	9	43	31	6	10	16	10	36	29	11
31	Wednesday	9	17	9	35	21	11	10	2	10	19	30	4	10	55	11	12	28	5

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.
 For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 4th, 8h. 52m. a.m. | Last Quarter. 19th, 7h. 50m. a.m.
 Full Moon .. 11th, 9h. 13m. a.m. | New Moon .. 26th, 9h. 26m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.					Llanelly.					Milford Haven.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H. M.	H. M.	H. M.	H. M.	P. I.	H. M.	H. M.	H. M.	H. M.	P. I.	H. M.	H. M.	H. M.	H. M.	P. I.
1	Monday..	8 28	8 50	20 11	9 3	9 25	21 5	9 3	9 25	21 5	9 3	9 25	20 11	9 3	9 25	20 11
2	Tuesday..	9 9	9 31	20 3	9 44	10 6	20 9	9 44	10 6	20 9	9 44	10 6	20 3	9 44	10 6	20 3
3	Wednesday	9 53	10 15	19 5	10 28	10 50	19 11	10 28	10 50	19 11	10 28	10 50	19 5	10 28	10 50	19 5
4	Thursday..	10 39	11 2	18 2	11 14	11 37	18 8	11 14	11 37	18 8	11 14	11 37	18 2	11 14	11 37	18 2
5	Friday ..	11 29	..	17 0	..	0 4	17 6	..	0 4	17 6	..	0 4	17 0	..	0 4	17 0
6	Saturday ..	0 3	0 42	16 4	0 38	1 17	16 10	0 38	1 17	16 10	0 38	1 17	16 4	0 38	1 17	16 4
7	Sunday ..	1 22	2 6	16 9	1 57	2 41	17 3	1 57	2 41	17 3	1 57	2 41	16 9	1 57	2 41	16 9
8	Monday..	2 46	3 22	17 10	3 21	3 57	18 4	3 21	3 57	18 4	3 21	3 57	17 10	3 21	3 57	17 10
9	Tuesday..	3 58	4 29	19 1	4 33	5 4	19 7	4 33	5 4	19 7	4 33	5 4	19 1	4 33	5 4	19 1
10	Wednesday	4 58	5 23	20 1	5 33	5 58	20 7	5 33	5 58	20 7	5 33	5 58	20 1	5 33	5 58	20 1
11	Thursday..	5 47	6 8	20 7	6 22	6 43	21 1	6 22	6 43	21 1	6 22	6 43	20 7	6 22	6 43	20 7
12	Friday ..	6 29	6 49	20 11	7 4	7 24	21 5	7 4	7 24	21 5	7 4	7 24	20 11	7 4	7 24	20 11
13	Saturday ..	7 5	7 23	21 0	7 40	7 58	21 6	7 40	7 58	21 6	7 40	7 58	21 0	7 40	7 58	21 0
14	Sunday ..	7 41	7 59	20 8	8 16	8 34	21 2	8 16	8 34	21 2	8 16	8 34	20 8	8 16	8 34	20 8
15	Monday..	8 16	8 32	20 1	8 51	9 7	20 7	8 51	9 7	20 7	8 51	9 7	20 1	8 51	9 7	20 1
16	Tuesday..	8 51	9 6	19 3	9 26	9 41	19 9	9 26	9 41	19 9	9 26	9 41	19 3	9 26	9 41	19 3
17	Wednesday	9 21	9 37	18 1	9 56	10 12	18 7	9 56	10 12	18 7	9 56	10 12	18 1	9 56	10 12	18 1
18	Thursday..	9 55	10 12	17 0	10 30	10 47	17 6	10 30	10 47	17 6	10 30	10 47	17 0	10 30	10 47	17 0
19	Friday ..	10 31	10 52	15 8	11 6	11 27	16 2	11 6	11 27	16 2	11 6	11 27	15 8	11 6	11 27	15 8
20	Saturday ..	11 21	11 52	14 6	11 56	..	15 0	11 56	..	15 0	11 56	..	14 6	11 56	..	14 6
21	Sunday ..	..	0 25	14 3	0 27	1 0	14 9	0 27	1 0	14 9	0 27	1 0	14 3	0 27	1 0	14 3
22	Monday..	1 8	1 52	14 8	1 43	2 27	15 2	1 43	2 27	15 2	1 43	2 27	14 8	1 43	2 27	14 8
23	Tuesday..	2 30	3 7	16 1	3 5	3 42	16 7	3 5	3 42	16 7	3 5	3 42	16 1	3 5	3 42	16 1
24	Wednesday	3 38	4 8	17 11	4 13	4 43	18 5	4 13	4 43	18 5	4 13	4 43	17 11	4 13	4 43	17 11
25	Thursday..	4 35	4 59	19 7	5 9	5 34	20 1	5 9	5 34	20 1	5 9	5 34	19 7	5 9	5 34	19 7
26	Friday ..	5 22	5 46	20 3	5 57	6 21	20 9	5 57	6 21	20 9	5 57	6 21	20 3	5 57	6 21	20 3
27	Saturday..	6 4	6 23	21 7	6 39	6 58	22 1	6 39	6 58	22 1	6 39	6 58	21 7	6 39	6 58	21 7
28	Sunday ..	6 45	7 5	22 5	7 20	7 40	22 11	7 20	7 40	22 11	7 20	7 40	22 5	7 20	7 40	22 5
29	Monday..	7 25	7 47	22 7	8 0	8 22	23 1	8 0	8 22	23 1	8 0	8 22	22 7	8 0	8 22	22 7
30	Tuesday..	8 8	8 30	22 2	8 43	9 5	22 8	8 43	9 5	22 8	8 43	9 5	22 2	8 43	9 5	22 2
31	Wednesday	8 52	9 10	21 4	9 27	9 45	21 10	9 27	9 45	21 10	9 27	9 45	21 4	9 27	9 45	21 4

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 4th, 8h. 52m. a.m. | Last Quarter. 19th, 7h. 50m. a.m.
 Full Moon .. 11th, 9h. 13m. a.m. | New Moon .. 26th, 9h. 26m. p.m.

M. D.	W. D.	Newport.				Swansea.				Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Mo	9 49	10 8	29	3	8 53	9 15	22	6	1 42	2 3	4 33	4 54	4 33	4 54		
2	Tu	10 26	10 45	28	3	9 34	9 56	21	9	2 25	2 45	5 16	5 38	5 16	5 38		
3	Wd	11 4	11 25	26	9	10 18	10 40	20	9	3 8	3 33	5 59	6 24	5 59	6 24		
4	Th	11 49	..	24	9	11 4	11 27	19	4	3 58	4 27	6 49	7 15	6 49	7 15		
5	Fri	0 16	0 46	22	10	11 54	..	18	0	4 58	5 31	7 44	8 14	7 44	8 14		
6	Sat	1 23	2 2	21	10	0 28	1 7	17	3	6 13	6 55	8 48	9 27	8 48	9 27		
7	Sun	2 40	3 21	22	5	1 47	2 31	17	8	7 33	8 10	10 5	10 42	10 5	10 42		
8	Mo	4 3	4 42	24	0	3 11	3 47	18	11	8 45	9 16	11 22	11 58	11 22	11 58		
9	Tu	5 21	5 53	26	3	4 23	4 54	20	5	9 46	10 12	..	0 30	..	0 30		
10	Wd	6 22	6 48	27	11	5 23	5 48	21	7	10 36	11 0	1 1	1 29	1 1	1 29		
11	Th	7 12	7 35	28	7	6 12	6 33	22	1	11 22	11 44	1 54	2 16	1 54	2 16		
12	Fri	7 55	8 15	29	3	6 54	7 14	22	6	..	0 5	2 38	2 59	2 38	2 59		
13	Sat	8 31	8 49	29	5	7 30	7 48	22	7	0 25	0 41	3 19	3 38	3 19	3 38		
14	Sun	9 6	9 22	28	9	8 6	8 24	22	2	1 0	1 18	3 54	4 12	3 54	4 12		
15	Mo	9 38	9 53	27	11	8 41	8 57	21	7	1 35	1 51	4 30	4 47	4 30	4 47		
16	Tu	10 9	10 23	26	7	9 16	9 31	20	7	2 7	2 26	5 4	5 20	5 4	5 20		
17	Wd	10 36	10 50	24	6	9 46	10 2	19	3	2 42	2 58	5 39	5 56	5 39	5 56		
18	Th	11 6	11 22	22	10	10 20	10 37	18	0	3 15	3 34	6 13	6 31	6 13	6 31		
19	Fri	11 41	..	20	7	10 56	11 17	16	5	3 54	4 17	6 51	7 11	6 51	7 11		
20	Sat	0 5	0 38	18	8	11 46	..	15	1	4 45	5 22	7 34	8 1	7 34	8 1		
21	Sun	1 11	1 47	18	3	0 17	0 50	14	10	5 59	6 40	8 38	9 15	8 38	9 15		
22	Mo	2 27	3 8	19	0	1 33	2 17	15	4	7 20	7 58	9 50	10 29	9 50	10 29		
23	Tu	3 46	4 26	21	4	2 55	3 32	17	0	8 31	9 3	11 9	11 44	11 9	11 44		
24	Wd	5 0	5 31	24	2	4 3	4 33	19	1	9 30	9 54	..	0 17	..	0 17		
25	Th	5 59	6 23	27	1	4 59	5 24	20	11	10 17	10 37	0 44	1 10	0 44	1 10		
26	Fri	6 47	7 11	28	3	5 47	6 11	21	9	10 59	11 21	1 34	1 55	1 34	1 55		
27	Sat	7 30	7 50	30	4	6 29	6 48	23	3	11 40	11 59	2 15	2 37	2 15	2 37		
28	Sun	8 11	8 31	31	6	7 10	7 30	24	2	..	0 21	2 55	3 14	2 55	3 14		
29	Mo	8 51	9 12	31	10	7 50	8 12	24	4	0 41	1 2	3 35	3 54	3 35	3 54		
30	Tu	9 31	9 51	31	3	8 33	8 55	23	11	1 24	1 44	4 14	4 36	4 14	4 36		
31	Wd	10 10	10 27	29	11	9 17	9 35	22	11	2 5	2 27	4 56	5 18	4 56	5 18		

The above are in Greenwich Mean Time, if local time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 2nd, 1h. 58m. p.m. | Last Quarter. 18th, 1h. 30m. a.m.
 Full Moon .. 9th, 10h. 12m. p.m. | New Moon .. 25th, 6h. 34m. a.m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgewater.					Bristol.							
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height			
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday.	9	21	9	42	26	3	11	5	11	23	13	10	10	45	11	3	27	4
2	Friday ..	10	6	10	30	24	8	11	46	..	11	10	11	26	11	51	24	..	5
3	Saturday..	10	57	11	30	23	2	0	11	0	42	10	0	..	0	22	21	..	6
4	Sunday ..	..	..	0	12	22	3	1	18	2	4	8	10	0	58	1	44	20	..
5	Monday..	0	59	1	46	22	6	2	48	3	32	9	2	2	28	3	12	20	..
6	Tuesday..	2	28	3	3	23	8	4	15	4	52	10	7	3	55	4	32	22	..
7	Wednesday	3	37	4	6	25	0	5	30	5	59	12	3	5	10	5	39	25	..
8	Thursday.	4	34	4	57	26	1	6	28	6	51	13	8	6	8	6	31	27	..
9	Friday ..	5	19	5	39	26	7	7	13	7	34	14	3	6	53	7	14	28	..
10	Saturday..	5	57	6	12	27	2	7	54	8	9	15	0	7	34	7	49	29	..
11	Sunday ..	6	30	6	47	27	5	8	26	8	43	15	3	8	6	8	23	29	..
12	Monday..	7	3	7	19	27	3	8	59	9	15	15	1	8	39	8	55	29	..
13	Tuesday..	7	32	7	48	26	10	9	27	9	41	14	7	9	7	9	21	28	..
14	Wednesday	8	3	8	20	26	1	9	55	10	11	13	8	9	35	9	51	27	..
15	Thursday.	8	36	8	52	25	2	10	25	10	39	12	6	10	5	10	19	25	..
16	Friday ..	9	6	9	23	28	10	10	52	11	6	10	10	10	32	10	46	22	..
17	Saturday..	9	43	10	4	22	7	11	24	11	44	9	3	11	4	11	24	20	..
18	Sunday ..	10	28	10	57	21	4	..	0	9	7	7	11	49	..	18	4	..	..
19	Monday..	11	31	..	..	20	9	0	43	1	20	6	11	0	23	1	0	17	..
20	Tuesday..	0	11	0	59	21	1	2	3	2	48	7	4	1	43	2	28	17	..
21	Wednesday	1	44	2	24	22	6	3	30	4	10	9	2	3	10	3	50	20	..
22	Thursday.	2	58	3	27	24	6	4	47	5	19	11	8	4	27	4	59	24	..
23	Friday ..	3	57	4	21	26	5	5	50	6	15	14	1	5	30	5	55	27	..
24	Saturday..	4	46	5	6	28	0	6	39	7	1	16	0	6	19	6	41	30	..
25	Sunday ..	5	30	5	49	28	6	7	24	7	45	16	8	7	4	7	25	31	..
26	Monday..	6	10	6	32	29	3	8	7	8	28	17	7	7	47	8	8	32	..
27	Tuesday..	6	53	7	13	29	5	8	49	9	9	17	10	8	29	8	49	33	..
28	Wednesday	7	34	7	56	28	11	9	29	9	49	17	2	9	9	9	29	32	..
29	Thursday.	8	18	8	40	27	9	10	9	10	28	15	9	9	49	10	8	30	..
30	Friday ..	9	1	9	23	26	2	10	48	11	6	13	9	10	28	10	46	27	..

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 2nd, 1h. 58m. p.m. | Last Quarter. 18th, 1h. 30m. a.m.
 Full Moon .. 9th, 10h. 12m. p.m. | New Moon .. 25th, 6h. 34m. a.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday.	9	56	10	17	20	4	10	37	10	55	28	4
2	Friday ..	10	41	11	5	18	4	11	18	11	43	25	10
3	Saturday.	11	32	..	..	16	6	..	0	14	23	6	0
4	Sunday ..	0	5	0	47	15	4	0	50	1	36	22	1
5	Monday..	1	34	2	21	15	8	2	20	3	4	22	6
6	Tuesday..	3	3	3	38	17	1	3	47	4	24	24	3
7	Wednesdy	4	12	4	41	18	9	5	2	5	31	26	5
8	Thursday.	5	9	5	32	20	2	6	0	6	23	28	1
9	Friday ..	5	54	6	14	20	9	6	45	7	6	28	11
10	Saturday.	6	32	6	47	21	6	7	26	7	41	29	9
11	Sunday ..	7	5	7	22	21	10	7	58	8	15	30	2
12	Monday..	7	38	7	54	21	7	8	31	8	47	29	11
13	Tuesday..	8	7	8	23	21	1	8	59	9	13	29	3
14	Wednesdy	8	38	8	55	20	2	9	27	9	43	28	1
15	Thursday.	9	11	9	27	19	0	9	57	10	11	26	7
16	Friday ..	9	41	9	58	17	4	10	24	10	38	24	6
17	Saturday..	10	18	10	39	15	9	10	56	11	16	22	7
18	Sunday ..	11	3	11	32	14	1	11	41	..	..	20	7
19	Monday..	..	0	0	6	13	5	0	15	0	52	19	8
20	Tuesday..	0	46	1	34	13	10	1	35	2	20	20	3
21	Wednesdy	2	19	2	59	15	8	3	2	3	42	22	6
22	Thursday.	3	33	4	2	18	2	4	19	4	51	25	6
23	Friday ..	4	32	4	56	20	7	5	22	5	47	28	7
24	Saturday..	5	21	5	41	22	6	6	11	6	33	31	1
25	Sunday ..	6	5	6	24	23	2	6	56	7	17	31	9
26	Monday..	6	45	7	7	24	1	7	39	8	0	33	0
27	Tuesday..	7	28	7	48	24	4	8	21	8	41	33	3
28	Wednesdy	8	9	8	31	23	8	9	1	9	21	32	6
29	Thursday.	8	53	9	15	22	3	9	41	10	0	30	9
30	Friday ..	9	36	9	58	20	3	10	20	10	38	28	3
		11	13	11	31	25	9						

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 2nd, 1h. 58m. p.m. | Last Quarter. 18th, 1h. 30m. a.m.
 Full Moon .. 9th, 10h. 12m. p.m. | New Moon .. 25th, 6h. 34m. a.m.

M. D.	WEEK DAYS.	Ilfracombe.					Llanelly.					Milford Haven.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H.	M.	H.	M.	F.	H.	M.	H.	M.	F.	H.	M.	H.	M.	F.
1	Thursday.	9	31	9	52	19 11	10	6	10	27	20 5	10	6	10	27	19 9
2	Friday ..	10	16	10	40	18 2	10	51	11	15	18 8	10	51	11	15	18 2
3	Saturday..	11	7	11	40	16 7	11	42	..	..	17 1	11	42	..	..	16 8
4	Sunday ..	..	..	0	22	15 7	0	15	0	57	16 1	0	15	0	57	15 9
5	Monday..	1	9	1	56	15 10	1	44	2	31	16 4	1	44	2	31	16 0
6	Tuesday..	2	38	3	13	17 1	3	13	3	48	17 7	3	13	3	48	17 2
7	Wednesday	3	47	4	16	18 7	4	22	4	51	19 1	4	22	4	51	18 6
8	Thursday.	4	44	5	7	19 9	5	19	5	42	20 3	5	19	5	42	19 7
9	Friday ..	5	29	5	49	20 3	6	4	6	24	20 9	6	4	6	24	20 1
10	Saturday..	6	7	6	22	20 14	6	42	6	57	21 5	6	42	6	57	20 8
11	Sunday ..	6	40	6	57	21 3	7	15	7	32	21 9	7	15	7	32	20 11
12	Monday..	7	13	7	29	21 0	7	48	8	4	21 6	7	48	8	4	20 9
13	Tuesday..	7	42	7	58	20 7	8	17	8	33	21 1	8	17	8	33	20 4
14	Wednesday	8	13	8	30	19 9	8	48	9	5	20 3	8	48	9	5	19 7
15	Thursday.	8	46	9	2	18 9	9	21	9	37	19 3	9	21	9	37	18 8
16	Friday ..	9	16	9	33	17 4	9	51	10	8	17 10	9	51	10	8	17 4
17	Saturday..	9	53	10	14	15 11	10	28	10	49	16 5	10	28	10	49	16 1
18	Sunday ..	10	38	11	7	14 6	11	13	11	42	15 0	11	13	11	42	14 10
19	Monday..	11	41	..	..	13 10	..	..	0	16	14 4	..	..	0	16	14 3
20	Tuesday..	0	21	1	9	14 3	0	56	1	44	14 9	0	56	1	44	14 7
21	Wednesday	1	54	2	34	15 10	2	29	3	9	16 4	2	29	3	9	16 0
22	Thursday.	3	8	3	37	18 0	3	43	4	12	18 6	3	43	4	12	18 0
23	Friday ..	4	7	4	31	20 1	4	42	5	6	20 7	4	42	5	6	19 11
24	Saturday..	4	56	5	16	21 10	5	31	5	51	22 4	5	31	5	51	21 6
25	Sunday ..	5	40	5	59	22 5	6	15	6	34	22 11	6	15	6	34	22 0
26	Monday ..	6	20	6	42	23 2	6	55	7	17	23 8	6	55	7	17	22 9
27	Tuesday..	7	3	7	23	23 5	7	38	7	58	23 11	7	38	7	58	22 14
28	Wednesday	7	44	8	6	22 10	8	19	8	41	23 4	8	19	8	41	22 5
29	Thursday.	8	28	8	50	21 7	9	3	9	25	22 1	9	3	9	25	21 3
30	Friday ..	9	11	9	33	19 10	9	46	10	8	20 4	9	46	10	8	19 6

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 2nd, 1h. 58m. p.m. | Last Quarter. 18th, 1h. 30m. a.m.
 Full Moon .. 9th, 10h. 12m. p.m. | New Moon .. 25th, 6h. 34m. a.m.

M. D.	W. D.	Newport.				Swansea.				Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.	
		H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.
1	Th	10 45	11 3	27 8	8	9 56	10 17	21 4	4	2 46	3 8	5 40	6 1	5 40	6 1		
2	Fri	11 26	11 51	24 9	9	10 41	11 5	19 4	4	3 32	3 59	6 24	6 48	6 24	6 48		
3	Sat	..	0 22	22 1	1	11 32	..	17 6	6	4 29	5 4	7 16	7 46	7 16	7 46		
4	Sun	0 58	1 44	20 5	5	0 5	0 47	16 4	4	5 45	6 36	8 20	9 2	8 20	9 2		
5	Mo	2 28	3 12	20 11	11	1 34	2 21	16 8	8	7 21	8 2	9 47	10 30	9 47	10 30		
6	Tu	3 55	4 32	22 11	11	3 3	3 38	18 1	1	8 38	9 8	11 13	11 51	11 13	11 51		
7	Wd	5 10	5 39	25 4	4	4 12	4 41	19 9	9	9 37	10 1	..	0 22	..	0 22		
8	Th	6 8	6 31	27 4	4	5 9	5 32	21 2	2	10 25	10 44	0 52	1 17	0 52	1 17		
9	Fri	6 53	7 14	28 3	3	5 54	6 14	21 9	9	11 5	11 24	1 42	2 2	1 42	2 2		
10	Sat	7 34	7 49	29 3	3	6 32	6 47	22 6	6	11 43	11 58	2 21	2 40	2 21	2 40		
11	Sun	8 6	8 23	29 9	9	7 5	7 22	22 10	10	..	0 16	2 58	3 13	2 58	3 13		
12	Mo	8 39	8 55	29 5	5	7 38	7 54	22 7	7	0 33	0 50	3 30	3 46	3 30	3 46		
13	Tu	9 7	9 21	28 7	7	8 7	8 23	22 1	1	1 6	1 19	4 2	4 18	4 2	4 18		
14	Wd	9 35	9 51	27 4	4	8 38	8 55	21 2	2	1 34	1 49	4 31	4 46	4 31	4 46		
15	Th	10 5	10 19	25 8	8	9 11	9 27	20 0	0	2 5	2 21	5 1	5 18	5 1	5 18		
16	Fri	10 32	10 46	23 2	2	9 41	9 58	18 4	4	2 37	2 52	5 34	5 51	5 34	5 51		
17	Sat	11 4	11 24	21 0	0	10 18	10 39	16 9	9	3 10	3 33	6 7	6 26	6 7	6 26		
18	Sun	11 49	..	18 8	8	11 3	11 32	15 1	1	3 56	4 26	6 49	7 13	6 49	7 13		
19	Mo	0 23	1 0	17 7	7	..	0 6	14 5	5	5 5	5 47	7 43	8 21	7 43	8 21		
20	Tu	1 43	2 28	18 3	3	0 46	1 34	14 10	10	6 35	7 21	9 4	9 46	9 4	9 46		
21	Wd	3 10	3 50	20 11	11	2 19	2 59	16 8	8	8 0	8 34	10 30	11 11	10 30	11 11		
22	Th	4 27	4 59	24 4	4	3 33	4 2	19 2	2	9 4	9 29	11 47	..	11 47	..		
23	Fri	5 30	5 55	27 11	11	4 32	4 56	21 7	7	9 53	10 14	0 18	0 43	0 18	0 43		
24	Sat	6 19	6 41	30 9	9	5 21	5 41	23 6	6	10 34	10 53	1 9	1 31	1 9	1 31		
25	Sun	7 4	7 25	31 6	6	6 5	6 24	24 2	2	11 15	11 34	1 52	2 10	1 52	2 10		
26	Mo	7 47	8 8	33 0	0	6 45	7 7	25 1	1	11 56	..	2 31	2 50	2 31	2 50		
27	Tu	8 29	8 49	33 4	4	7 28	7 48	25 4	4	0 18	0 39	3 11	3 32	3 11	3 32		
28	Wd	9 9	9 29	32 4	4	8 9	8 31	24 8	8	1 0	1 21	3 52	4 12	3 52	4 12		
29	Th	9 49	10 8	30 4	4	8 53	9 15	23 3	3	1 42	2 3	4 33	4 54	4 33	4 54		
30	Fri	10 28	10 46	27 6	6	9 36	9 58	21 3	3	2 25	2 47	5 16	5 38	5 16	5 38		

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 1st, 9h. 19m. p.m. | New Moon .. 24th, 3h. 36m. p.m.
 Full Moon .. 9th, 1h. 43m. p.m. | First Quarter. 31st, 8h. 1m. a.m.
 Last Quarter 17th, 6h. 14m. p.m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgewater.					Bristol.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H.	M.	H.	M.	F.	H.	M.	H.	M.	F.	H.	M.	H.	M.	F.
1	Saturday..	9	48	10	17	24	4	11	29	11	57	11	5	11	9	11
2	Sunday ..	10	46	11	19	32	8	..	0	29	9	4	..	0	9	20
3	Monday..	..	..	0	1	21	10	1	7	1	52	8	4	0	47	1
4	Tuesday..	0	50	1	39	22	2	2	40	3	25	8	9	2	20	3
5	Wednesday	2	19	2	52	23	4	4	5	4	41	10	2	3	45	4
6	Thursday.	3	19	3	45	24	9	5	11	5	38	12	0	4	51	5
7	Friday ..	4	10	4	32	25	10	6	4	6	26	13	4	5	44	6
8	Saturday..	4	52	5	11	26	7	6	47	7	5	14	3	6	27	6
9	Sunday ..	5	30	5	44	26	11	7	24	7	39	14	8	7	4	7
10	Monday..	5	58	6	14	27	3	7	55	8	11	15	1	7	35	7
11	Tuesday..	6	31	6	46	27	2	8	27	8	42	15	0	8	7	8
12	Wednesday	7	1	7	16	26	9	8	57	9	12	14	6	8	37	8
13	Thursday.	7	30	7	46	26	1	9	25	9	39	13	8	9	5	9
14	Friday ..	8	3	8	18	25	2	9	55	10	9	12	6	9	35	9
15	Saturday..	8	37	8	53	24	1	10	26	10	40	11	2	10	6	10
16	Sunday ..	9	15	9	37	22	11	10	59	11	18	9	8	10	39	10
17	Monday..	10	0	10	29	21	9	11	40	..	8	2	11	20	11	50
18	Tuesday..	11	4	11	38	20	11	0	10	0	50	7	1	..	0	30
19	Wednesday	..	..	0	21	21	4	1	27	2	13	7	7	1	7	1
20	Thursday.	1	6	1	48	22	9	2	54	3	34	9	6	2	34	3
21	Friday ..	2	23	2	54	24	8	4	9	4	42	11	10	3	49	4
22	Saturday..	3	21	3	45	26	7	5	12	5	38	14	3	4	52	5
23	Sunday ..	4	11	4	35	28	3	6	5	6	29	16	4	5	45	6
24	Monday..	4	57	5	20	29	3	6	51	7	14	17	7	6	31	6
25	Tuesday..	5	43	6	6	29	5	7	38	8	3	17	10	7	18	7
26	Wednesday	6	28	6	51	29	5	8	24	8	47	17	10	8	4	8
27	Thursday.	7	13	7	34	28	9	9	9	9	29	17	0	8	49	9
28	Friday ..	7	59	8	23	27	6	9	52	10	13	15	5	9	32	9
29	Saturday..	8	47	9	9	25	11	10	35	10	55	13	5	10	15	10
30	Sunday ..	9	34	10	1	24	2	11	16	11	41	11	3	10	56	11
31	Monday..	10	32	11	5	22	8	..	0	14	9	4	11	11	54	..

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 1st, 9h. 19m. p.m. | New Moon .. 24th, 3h. 36m. p.m.
 Full Moon .. 9th, 1h. 43m. p.m. | First Quarter. 31st, 8h. 1m. a.m.
 Last Quarter. 17th, 6h. 14m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Saturday..	10	23	10	52	17	11	11	1	11	29	25	3
2	Sunday ..	11	21	11	54	15	10	..	0	1	22	9	0
3	Monday..	..	..	0	36	14	10	0	39	1	24	21	5
4	Tuesday..	1	25	2	14	15	3	2	12	2	57	22	0
5	Wednesday	2	54	3	27	16	8	3	37	4	13	23	9
6	Thursday.	3	54	4	20	18	6	4	43	5	10	26	0
7	Friday ..	4	45	5	7	19	10	5	36	5	58	27	8
8	Saturday..	5	27	5	46	20	9	6	19	6	37	28	11
9	Sunday ..	6	5	6	19	21	2	6	56	7	11	29	5
10	Monday..	6	33	6	49	21	7	7	27	7	43	29	11
11	Tuesday..	7	6	7	21	21	6	7	59	8	14	29	9
12	Wednesday	7	36	7	51	21	0	8	29	8	44	29	1
13	Thursday.	8	5	8	21	20	2	8	57	9	11	28	1
14	Friday ..	8	38	8	53	19	0	9	27	9	41	26	7
15	Saturday..	9	12	9	28	17	8	9	58	10	12	24	11
16	Sunday ..	9	50	10	12	16	2	10	31	10	50	23	2
17	Monday..	10	35	11	4	14	8	11	12	11	42	21	3
18	Tuesday..	11	39	..	..	13	7	..	0	22	20	0	0
19	Wednesday	0	13	0	56	14	1	0	59	1	45	20	7
20	Thursday.	1	41	2	23	16	0	2	26	3	6	22	10
21	Friday ..	2	58	3	29	18	4	3	41	4	14	25	10
22	Saturday..	3	56	4	20	20	9	4	44	5	10	28	11
23	Sunday ..	4	46	5	10	22	10	5	37	6	1	31	5
24	Monday..	5	32	5	55	24	1	6	23	6	46	33	0
25	Tuesday..	6	18	6	41	24	4	7	10	7	35	33	3
26	Wednesday	7	3	7	26	24	4	7	56	8	19	33	3
27	Thursday	7	48	8	9	23	6	8	41	9	1	32	2
28	Friday ..	8	34	8	58	21	11	9	24	9	45	30	4
29	Saturday..	9	22	9	44	19	11	10	7	10	27	27	10
30	Sunday ..	10	9	10	36	17	9	10	48	11	13	25	0
31	Monday..	11	7	11	40	15	10	11	46	..	..	22	9

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 16m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 1st, 9h. 19m. p.m. | New Moon .. 24th, 3h. 36m. p.m.
 Full Moon .. 9th, 1h. 43m. p.m. | First Quarter. 31st, 8h. 1m. a.m.
 Last Quarter. 17th, 6h. 14m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.					Llanelly.					Milford Haven.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H. M.	H. M.	H. M.	F. I.		H. M.	H. M.	H. M.	F. I.		H. M.	H. M.	H. M.	F. I.	
1	Saturday ..	9 58	10 27	17 10			10 33	11 2	18 4			10 33	11 2	17 10		
2	Sunday ..	10 56	11 29	16 0			11 31	..	16 6			11 31	..	16 2		
3	Monday ..	..	0 11	15 1			0 4	0 46	15 7			0 4	0 46	15 4		
4	Tuesday ..	1 0	1 49	15 6			1 35	2 24	16 0			1 35	2 24	15 8		
5	Wednesday ..	2 29	3 21	16 9			3 4	3 37	17 3			3 4	3 37	16 10		
6	Thursday ..	3 29	3 55	18 4			4 4	4 30	18 10			4 4	4 30	18 3		
7	Friday ..	4 20	4 42	19 6			4 55	5 17	20 0			4 55	5 17	19 4		
8	Saturday ..	5 2	5 21	20 3			5 37	5 56	20 9			5 37	5 56	20 1		
9	Sunday ..	5 40	5 54	20 8			6 15	6 29	21 2			6 15	6 29	20 5		
10	Monday ..	6 8	6 24	21 0			6 43	6 59	21 6			6 43	6 59	20 9		
11	Tuesday ..	6 41	6 56	20 11			7 16	7 31	21 5			7 16	7 31	20 8		
12	Wednesday ..	7 11	7 26	20 6			7 46	8 1	21 0			7 46	8 1	20 3		
13	Thursday ..	7 40	7 56	19 9			8 15	8 31	20 3			8 15	8 31	19 7		
14	Friday ..	8 13	8 28	18 9			8 48	9 3	19 3			8 48	9 3	18 8		
15	Saturday ..	8 47	9 3	17 7			9 22	9 38	18 1			9 22	9 38	17 7		
16	Sunday ..	9 25	9 47	16 3			10 0	10 22	16 9			10 0	10 22	16 5		
17	Monday ..	10 10	10 39	15 0			10 45	11 14	15 6			10 45	11 14	15 3		
18	Tuesday ..	11 14	11 48	14 0			11 49	..	14 6			11 49	..	14 5		
19	Wednesday ..	..	0 31	14 6			0 23	1 6	15 0			0 23	1 6	14 10		
20	Thursday ..	1 16	1 58	16 1			1 51	2 33	16 7			1 51	2 33	16 3		
21	Friday ..	2 33	3 4	18 2			3 8	3 39	18 8			3 8	3 39	18 2		
22	Saturday ..	3 31	3 55	20 3			4 6	4 30	20 9			4 6	4 30	20 1		
23	Sunday ..	4 21	4 45	22 1			4 56	5 20	22 7			4 56	5 20	21 9		
24	Monday ..	5 7	5 30	23 2			5 42	6 5	23 8			5 42	6 5	22 9		
25	Tuesday ..	5 53	6 16	23 5			6 28	6 51	23 11			6 28	6 51	22 11		
26	Wednesday ..	6 38	7 1	23 5			7 13	7 36	23 11			7 13	7 36	22 11		
27	Thursday ..	7 23	7 44	22 8			7 58	8 19	23 2			7 58	8 19	22 3		
28	Friday ..	8 9	8 33	21 4			8 44	9 8	21 10			8 44	9 8	21 0		
29	Saturday ..	8 57	9 19	19 7			9 32	9 54	20 1			9 32	9 54	19 5		
30	Sunday ..	9 44	10 11	17 8			10 19	10 46	18 2			10 19	10 46	17 8		
31	Monday ..	10 42	11 15	16 0			11 17	11 50	16 6			11 17	11 50	16 2		

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub* 16m.—Llanelly, *sub* 16m.—Milford Haven, *sub* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

First Quarter. 1st, 9h. 19m. p.m. | New Moon .. 24th, 3h. 36m. p.m.
 Full Moon .. 9th, 1h. 43m. p.m. | First Quarter. 31st, 8h. 1m. a.m.
 Last Quarter. 17th, 6h. 14m. p.m.

		Newport.						Swansea.						Liverpool.				London.			
M.	W.	Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.		Morn.		Even.	
D.	D.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	H.	M.	H.	M.
1	Sat	11	9	11	37	24	0	10	23	10	52	18	11	3	10	3	38	6	2	6	26
2	Sun	..	..	0	9	21	2	11	21	11	54	16	10	4	12	4	50	6	55	7	29
3	Mo	0	47	1	32	19	7	..	..	0	36	15	10	5	32	6	22	8	6	8	49
4	Tu	2	20	3	5	20	3	1	25	2	14	16	3	7	13	7	55	9	35	10	22
5	Wd	3	45	4	21	22	5	2	54	3	27	17	8	8	30	9	0	11	6	11	43
6	Th	4	51	5	18	24	11	3	54	4	20	19	6	9	23	9	44	..	..	0	13
7	Fri	5	44	6	6	26	11	4	45	5	7	20	10	10	5	10	23	0	37	0	59
8	Sat	6	27	6	45	28	3	5	27	5	46	21	9	10	40	10	58	1	21	1	40
9	Sun	7	4	7	19	28	9	6	5	6	19	22	2	11	15	11	29	1	58	2	14
10	Mo	7	35	7	51	29	5	6	33	6	49	22	7	11	44	12	0	2	31	2	45
11	Tu	8	7	8	22	29	3	7	6	7	21	22	6	..	0	17	2	59	3	15	
12	Wd	8	37	8	52	28	5	7	36	7	51	22	0	0	32	0	48	3	31	3	45
13	Th	9	5	9	19	27	4	8	5	8	21	21	2	1	3	1	17	4	0	4	15
14	Fri	9	35	9	49	25	8	8	38	8	53	20	0	1	32	1	49	4	29	4	44
15	Sat	10	6	10	20	23	8	9	12	9	28	18	8	2	3	2	22	5	1	5	16
16	Sun	10	39	10	58	21	8	9	50	10	12	17	2	2	39	3	2	5	35	5	53
17	Mo	11	20	11	50	19	5	10	35	11	4	15	8	3	26	3	52	6	17	6	42
18	Tu	..	..	0	30	18	0	11	39	..	14	7	4	4	28	5	13	7	9	7	45
19	Wd	1	7	1	53	18	8	0	13	0	56	15	1	5	55	6	46	8	29	9	11
20	Th	2	34	3	14	21	4	1	41	2	23	17	0	7	27	8	3	9	56	10	36
21	Fri	3	49	4	22	24	9	2	58	3	29	19	4	8	33	9	1	11	15	11	46
22	Sat	4	52	5	18	28	3	3	56	4	20	21	9	9	24	9	41	..	..	0	14
23	Sun	5	45	6	9	31	2	4	46	5	10	23	10	10	6	10	25	0	38	0	59
24	Mo	6	31	6	54	33	0	5	32	5	55	25	1	10	44	11	6	1	22	1	43
25	Tu	7	18	7	43	33	4	6	18	6	41	25	4	11	28	11	52	2	2	2	22
26	Wd	8	4	8	47	33	4	7	3	7	26	25	4	..	0	14	2	44	3	7	
27	Th	8	49	9	9	32	0	7	48	8	9	24	6	0	37	1	0	3	28	3	50
28	Fri	9	32	9	53	29	11	8	34	8	58	22	11	1	21	1	45	4	12	4	33
29	Sat	10	15	10	35	27	1	9	22	9	44	20	11	2	8	2	33	4	57	5	21
30	Sun	10	56	11	21	23	9	10	9	10	36	18	9	2	56	3	23	5	46	6	11
31	Mo	11	54	..	..	21	2	11	7	11	40	16	10	3	53	4	32	6	39	7	10

The above are in Greenwich Mean Time, if local time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

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PHASES OF THE MOON.

Full Moon .. 8th, 7h. 32m. a.m. | New Moon .. 23rd, 1h. 21m. a.m.
 Last Quarter. 16th, 8h. 59m. a.m. | First Quarter. 29th, 10h. 33m. p.m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgewater.					Bristol.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H. M.	H. M.	F. I.	F. I.		H. M.	H. M.	F. I.	F. I.		H. M.	H. M.	F. I.	F. I.	
1	Tuesday..	11 42	..	21 11			0 51	1 31	8 5			0 31	1 11	19 4		
2	Wednesday	0 23	1 8	22 1			2 14	2 56	8 8			1 54	2 36	19 5		
3	Thursday..	1 45	2 21	23 1			3 31	4 8	9 11			3 11	3 48	21 7		
4	Friday ..	2 50	3 16	24 3			4 39	5 7	11 4			4 19	4 47	23 7		
5	Saturday..	3 39	3 59	25 3			5 32	5 52	12 7			5 12	5 32	25 6		
6	Sunday ..	4 19	4 39	26 0			6 13	6 33	13 6			5 53	6 13	26 10		
7	Monday..	4 57	5 16	26 5			6 51	7 10	14 1			6 31	6 50	27 8		
8	Tuesday..	5 33	5 48	26 7			7 27	7 44	14 3			7 7	7 24	28 0		
9	Wednesday	6 3	6 20	26 8			8 0	8 16	14 4			7 40	7 56	28 1		
10	Thursday..	6 33	6 50	26 5			8 29	8 46	14 1			8 9	8 26	27 8		
11	Friday ..	7 7	7 21	25 11			9 3	9 16	13 5			8 43	8 56	26 4		
12	Saturday..	7 37	7 55	25 3			9 32	9 48	12 7			9 12	9 28	25 6		
13	Sunday ..	8 15	8 34	24 4			10 6	10 23	11 5			9 46	10 3	23 9		
14	Monday..	8 55	9 18	23 4			10 42	11 2	10 2			10 22	10 42	22 6		
15	Tuesday..	9 42	10 6	22 6			11 23	11 46	9 2			11 3	11 26	20 6		
16	Wednesday	10 35	11 8	21 9			..	0 17	8 2			11 57	..	19 1		
17	Thursday..	11 43	..	22 1			0 54	1 33	8 8			0 34	1 13	19 5		
18	Friday ..	0 21	1 3	23 0			2 13	2 51	9 9			1 53	2 31	21 5		
19	Saturday..	1 40	2 13	24 8			3 26	3 58	11 10			3 6	3 38	24 4		
20	Sunday ..	2 40	3 8	26 5			4 28	4 59	14 1			4 8	4 39	27 8		
21	Monday..	3 37	4 4	27 10			5 30	5 58	15 10			5 10	5 88	30 3		
22	Tuesday..	4 29	4 55	28 8			6 23	6 49	16 10			6 3	6 29	31 8		
23	Wednesday	5 22	5 45	28 10			7 17	7 40	17 1			6 57	7 20	32 0		
24	Thursday..	6 10	6 33	28 10			8 7	8 29	17 1			7 47	8 9	32 0		
25	Friday ..	6 57	7 21	28 3			8 53	9 16	16 4			8 33	8 56	30 11		
26	Saturday..	7 45	8 7	27 3			9 38	9 59	15 1			9 18	9 39	29 2		
27	Sunday ..	8 33	8 58	25 11			10 22	10 46	13 5			10 2	10 26	26 5		
28	Monday..	9 22	9 46	24 6			11 5	11 27	11 8			10 45	11 7	24 0		
29	Tuesday..	10 12	10 39	23 3			11 52	..	10 1			11 32	..	21 10		
30	Wednesday	11 8	11 40	22 3			0 21	0 54	8 10			0 1	0 34	20 0		

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 8th, 7h. 32m. a.m. | New Moon .. 23rd, 1h. 21m. a.m.
 Last Quarter . 16th, 8h. 59m. a.m. | First Quarter . 29th, 10h. 33m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.	Even.	Height		Morn.	Even.	Height		Morn.	Even.	Height	
		H. M.	H. M.	F.	I.	H. M.	H. M.	F.	I.	H. M.	H. M.	F.	I.
1	Tuesday..	..	0 17	14	11	0 23	1 3	21	6	1 16	1 56	17	5
2	Wednesday	0 58	1 43	15	2	1 46	2 28	21	10	2 39	3 21	17	9
3	Thursday..	2 20	2 56	16	5	3 3	3 40	23	5	3 56	4 33	19	9
4	Friday ..	3 25	3 51	17	10	4 11	4 39	25	2	5 4	5 32	21	11
5	Saturday..	4 14	4 34	19	1	5 4	5 24	26	9	5 57	6 17	23	11
6	Sunday ..	4 54	5 14	20	0	5 45	6 5	28	0	6 38	6 58	25	5
7	Monday..	5 32	5 51	20	7	6 23	6 42	28	7	7 16	7 35	26	3
8	Tuesday..	6 8	6 23	20	9	6 59	7 16	28	11	7 52	8 9	26	7
9	Wednesday	6 38	6 55	20	10	7 32	7 48	29	0	8 25	8 41	26	9
10	Thursday..	7 8	7 25	20	7	8 1	8 18	28	7	8 54	9 12	26	3
11	Friday ..	7 42	7 56	19	11	8 35	8 48	27	10	9 28	9 41	25	3
12	Saturday..	8 12	8 30	19	1	9 4	9 20	26	9	9 57	10 13	23	11
13	Sunday ..	8 50	9 9	17	11	9 38	9 55	25	3	10 31	10 46	22	1
14	Monday..	9 30	9 53	16	8	10 14	10 34	23	9	11 7	11 27	20	3
15	Tuesday..	10 17	10 41	15	8	10 55	11 18	22	6	11 48	..	18	7
16	Wednesday	11 10	11 43	14	8	11 49	..	21	3	0 11	0 42	17	1
17	Thursday..	..	0 18	15	2	0 26	1 5	21	10	1 19	1 58	17	9
18	Friday ..	0 56	1 38	16	3	1 45	2 23	23	3	2 38	3 16	19	7
19	Saturday..	2 15	2 48	18	4	2 58	3 30	25	10	3 51	4 23	22	9
20	Sunday ..	3 15	3 43	20	7	4 0	4 31	28	7	4 53	5 24	26	3
21	Monday..	4 12	4 39	22	4	5 2	5 30	30	10	5 55	6 23	29	1
22	Tuesday..	5 4	5 30	23	4	5 55	6 21	32	0	6 48	7 14	30	7
23	Wednesday	5 57	6 20	23	7	6 49	7 12	32	4	7 42	8 5	30	11
24	Thursday..	6 45	7 8	23	7	7 39	8 1	32	4	8 32	8 54	30	11
25	Friday ..	7 32	7 56	22	10	8 25	8 48	31	5	9 18	9 41	29	9
26	Saturday..	8 20	8 42	21	7	9 10	9 31	29	11	10 3	10 24	27	11
27	Sunday ..	9 8	9 33	19	11	9 54	10 18	27	10	10 47	11 11	25	3
28	Monday..	9 57	10 21	18	2	10 37	10 59	25	6	11 30	11 52	22	5
29	Tuesday ..	10 47	11 14	16	7	11 24	11 53	23	8	..	0 17	20	1
30	Wednesday	11 43	..	15	4	..	0 26	22	1	0 46	1 19	18	24

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 8th, 7h. 32m. a.m. | New Moon .. 23rd, 1h. 21m. a.m.
 Last Quarter . 16th, 8h. 59m. a.m. | First Quarter. 29th, 10h. 33m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.					Llanelly.					Milford Haven.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H. M.	H. M.	F. I.	F. I.		H. M.	H. M.	F. I.	F. I.		H. M.	H. M.	F. I.	F. I.	
1	Tuesday..	11 52	..	15	2		..	0 27	15	8		..	0 27	15	9	
2	Wednesday	0 33	1 18	15	5		1 8	1 53	15	11		1 8	1 53	15	7	
3	Thursday..	1 55	2 31	16	6		2 30	3 6	17	0		2 30	3 6	16	7	
4	Friday ..	3 0	3 26	17	9		3 35	4 1	18	3		3 35	4 1	17	9	
5	Saturday..	3 49	4 9	18	10		4 24	4 44	19	4		4 24	4 44	18	9	
6	Sunday ..	4 29	4 49	19	8		5 4	5 24	20	2		5 4	5 24	19	6	
7	Monday..	5 7	5 26	20	1		5 42	6 1	20	7		5 42	6 1	19	11	
8	Tuesday..	5 43	6 58	20	3		6 18	6 33	20	9		6 18	6 33	20	1	
9	Wednesday	6 13	6 30	20	4		6 48	7 5	20	10		6 48	7 5	20	2	
10	Thursday..	6 43	7 0	20	1		7 18	7 35	20	7		7 18	7 35	19	11	
11	Friday ..	7 17	7 31	19	7		7 52	8 6	20	1		7 52	8 6	19	5	
12	Saturday..	7 47	8 5	18	10		8 22	8 40	19	4		8 22	8 40	18	9	
13	Sunday ..	8 25	8 44	17	10		9 0	9 19	18	4		9 0	9 19	17	10	
14	Monday..	9 5	9 28	16	9		9 40	10 3	17	3		9 40	10 3	16	10	
15	Tuesday..	9 52	10 16	15	10		10 27	10 51	16	4		10 27	10 51	16	0	
16	Wednesday	10 45	11 18	15	0		11 20	11 53	15	6		11 20	11 53	15	3	
17	Thursday..	11 53	..	15	5		..	0 28	15	11		..	0 28	15	7	
18	Friday ..	0 31	1 13	16	4		1 6	1 48	16	10		1 6	1 48	16	6	
19	Saturday..	1 50	2 23	18	2		2 25	2 58	18	8		2 25	2 58	18	2	
20	Sunday ..	2 50	3 18	20	1		3 25	3 53	20	7		3 25	3 53	19	11	
21	Monday..	3 47	4 14	21	8		4 22	4 49	22	2		4 22	4 49	21	4	
22	Tuesday..	4 39	5 5	22	7		5 14	5 40	23	1		5 14	5 40	22	2	
23	Wednesday	5 32	5 55	22	9		6 7	6 30	23	3		6 7	6 30	22	4	
24	Thursday..	6 20	6 43	22	9		6 55	7 18	23	3		6 55	7 18	22	4	
25	Friday ..	7 7	7 31	22	1		7 42	8 6	22	7		7 42	8 6	21	9	
26	Saturday..	7 55	8 17	21	0		8 30	8 52	21	6		8 30	8 52	20	9	
27	Sunday ..	8 43	9 8	19	7		9 18	9 43	20	1		9 18	9 43	19	5	
28	Monday ..	9 32	9 56	18	0		10 7	10 31	18	6		10 7	10 31	18	0	
29	Tuesday..	10 22	10 49	16	8		10 57	11 24	17	2		10 57	11 24	16	9	
30	Wednesday	11 18	11 50	15	7		11 53	..	16	1		11 53	..	15	9	

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 8th, 7h. 32m. a.m. | New Moon .. 23rd, 1h. 21m. a.m.
 Last Quarter . 16th, 8h. 59m. a.m. | First Quarter. 29th, 10h. 33m. p.m.

M. D.	W. D.	Newport.				Swansea.				Liverpool.				London.			
		Morn.		Even.		Height		Morn.		Even.		Height		Morn.		Even.	
		H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.	H. M.	H. M.	F. I.	F. I.
1	Tu	0 31	1 11	19	9	..	0 17	15	11	5 15	5 59	7 49	8 31	7 49	8 31	..	..
2	Wd	1 54	2 36	20	1	0 58	1 43	16	2	6 47	7 29	9 15	9 57	9 15	9 57	..	..
3	Th	3 11	3 48	22	0	2 20	2 56	17	5	8 1	8 32	10 38	11 12	10 38	11 12	..	..
4	Fri	4 19	4 47	23	11	3 25	3 51	18	10	8 58	9 20	11 45	..	11 45	..	..	..
5	Sat	5 12	5 32	25	10	4 14	4 34	20	1	9 39	9 55	0 11	0 34	0 11	0 34	..	..
6	Sun	5 53	6 13	27	3	4 54	5 14	21	0	10 12	10 28	0 54	1 11	0 54	1 11	..	..
7	Mo	6 31	6 50	27	11	5 32	5 51	21	7	10 44	11 2	1 29	1 46	1 29	1 46	..	..
8	Tu	7 7	7 24	28	3	6 8	6 23	21	9	11 18	11 33	2 2	2 18	2 2	2 18	..	..
9	Wd	7 40	7 56	28	4	6 38	6 55	21	10	11 49	..	2 34	2 49	2 34	2 49	..	..
10	Th	8 9	8 26	27	11	7 8	7 25	21	7	0 6	0 19	3 4	3 20	3 4	3 20	..	..
11	Fri	8 43	8 56	27	1	7 42	7 56	20	11	0 36	0 54	3 33	3 49	3 33	3 49	..	..
12	Sat	9 12	9 28	25	10	8 12	8 30	20	1	1 8	1 24	4 6	4 20	4 6	4 20	..	..
13	Sun	9 46	10 3	24	0	8 50	9 9	18	11	1 41	2 0	4 36	4 53	4 36	4 53	..	..
14	Mo	10 22	10 42	22	5	9 30	9 53	17	8	2 19	2 41	5 13	5 32	5 13	5 32	..	..
15	Tu	11 3	11 26	20	11	10 17	10 41	16	8	3 5	3 32	5 55	6 21	5 55	6 21	..	..
16	Wd	11 57	..	19	5	11 10	11 43	15	8	3 59	4 35	6 48	7 16	6 48	7 16	..	..
17	Th	0 34	1 13	20	1	..	0 18	16	2	5 18	6 1	7 52	8 34	7 52	8 34	..	..
18	Fri	1 53	2 31	21	10	0 56	1 38	17	3	6 46	7 24	9 17	9 56	9 17	9 56	..	..
19	Sat	3 6	3 38	24	9	2 15	2 48	19	4	7 56	8 25	10 33	11 7	10 33	11 7	..	..
20	Sun	4 8	4 39	27	11	3 15	3 43	21	7	8 49	9 13	11 37	..	11 37	..	..	..
21	Mo	5 10	5 38	30	6	4 12	4 39	23	4	9 37	10 0	0 2	0 27	0 2	0 27	..	..
22	Tu	6 3	6 29	31	10	5 4	5 30	24	4	10 21	10 42	0 52	1 16	0 52	1 16	..	..
23	Wd	6 57	7 20	32	2	5 57	6 20	24	7	11 8	11 30	1 38	2 0	1 38	2 0	..	..
24	Th	7 47	8 9	32	2	6 45	7 8	24	7	11 56	..	2 24	2 46	2 24	2 46	..	..
25	Fri	8 33	8 56	31	2	7 32	7 56	23	10	0 19	0 43	3 11	3 33	3 11	3 33	..	..
26	Sat	9 18	9 39	29	5	8 20	8 42	22	7	1 8	1 31	3 56	4 20	3 56	4 20	..	..
27	Sun	10 2	10 26	27	1	9 8	9 33	20	11	1 52	2 18	4 43	5 5	4 43	5 5	..	..
28	Mo	10 45	11 7	24	4	9 57	10 21	19	2	2 44	3 9	5 31	5 58	5 31	5 58	..	..
29	Tu	11 32	..	22	3	10 47	11 14	17	7	3 36	4 6	6 25	6 53	6 25	6 53	..	..
30	Wd	0 1	0 34	20	5	11 43	..	16	4	4 40	5 18	7 23	7 57	7 23	7 57	..	..

The above are in Greenwich Mean Time, if local Time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 8th, 2h. 39m. a.m. | New Moon .. 22nd, 0h. 19m. p.m.
 Last Quarter. 15th, 9h. 11m. p.m. | First Quarter. 29th, 4h. 38m. p.m.

M. D.	WEEK DAYS.	Barnstaple.					Bridgewater.					Bristol.				
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Height
		H. M.	H. M.	H. M.	H. M.	F. I.	H. M.	H. M.	H. M.	H. M.	F. I.	H. M.	H. M.	H. M.	H. M.	F. I.
1	Thursday..	..	0 14	22	1	1	1 29	2 6	8	8	1	1 9	1 46	19	9	1
2	Friday ..	0 51	1 26	22	6	2	2 41	3 13	9	2	2	2 21	2 53	20	6	2
3	Saturday..	1 58	2 28	23	3	3	3 43	4 15	10	1	3	3 23	3 55	21	10	3
4	Sunday ..	2 56	3 21	24	2	4	4 45	5 12	11	3	4	4 25	4 52	23	5	4
5	Monday..	3 42	4 32	24	10	5	5 35	5 57	12	1	5	5 15	5 37	24	8	5
6	Tuesday..	4 26	4 44	25	4	6	6 20	6 38	12	8	6	6 0	6 18	25	8	6
7	Wednesdy	5 4	5 23	25	8	6	6 58	7 18	13	1	6	6 38	6 58	26	2	7
8	Thursday.	5 41	5 57	25	10	7	7 36	7 54	13	4	7	7 16	7 34	26	6	8
9	Friday ..	6 15	6 32	25	11	8	8 11	8 28	13	5	7	7 51	8 8	26	8	9
10	Saturday..	6 50	7 8	25	9	8	8 46	9 4	13	3	8	8 26	8 44	26	4	10
11	Sunday ..	7 25	7 43	25	5	9	9 20	9 38	12	10	9	9 0	9 18	25	9	11
12	Monday..	8 3	8 24	24	11	9	9 55	10 14	12	2	9	9 35	9 54	24	10	12
13	Tuesday..	8 45	9 6	24	4	10	10 32	10 52	11	5	10	10 12	10 32	23	9	13
14	Wednesdy	9 29	9 51	23	9	11	11 11	11 31	10	9	10	10 51	11 11	22	9	14
15	Thursday.	10 16	10 41	23	3	11	11 56	..	10	1	11	11 36	..	21	10	15
16	Friday ..	11 8	11 38	22	11	0	0 24	0 54	9	8	0	0 4	0 34	21	3	16
17	Saturday..	..	0 10	23	4	1	1 27	2 2	10	2	1	1 7	1 42	22	0	17
18	Sunday ..	0 48	1 25	24	2	2	2 38	3 12	11	3	2	2 18	2 52	23	5	18
19	Monday..	2 0	2 34	25	5	3	3 45	4 20	12	10	3	3 25	4 0	25	9	19
20	Tuesday..	3 6	3 35	26	8	4	4 56	5 27	14	4	4	4 36	5 7	28	1	20
21	Wednesdy	4 6	4 33	27	6	5	5 59	6 27	15	5	5	5 39	6 7	29	8	21
22	Thursday.	5 2	5 32	27	9	6	6 56	7 26	15	9	6	6 36	7 6	30	1	22
23	Friday ..	5 57	6 23	28	0	7	7 54	8 19	16	0	7	7 34	7 59	30	6	23
24	Saturday..	6 48	7 11	27	10	8	8 44	9 7	15	10	8	8 24	8 47	30	3	24
25	Sunday ..	7 34	7 56	27	2	9	9 29	9 49	15	0	9	9 9	9 29	29	0	25
26	Monday..	8 19	8 42	26	4	10	10 10	10 30	13	11	9	9 50	10 10	27	6	26
27	Tuesday..	9 4	9 25	25	4	10	10 50	11 7	12	8	10	10 20	10 47	25	8	27
28	Wednesdy	9 45	10 6	24	3	11	11 26	11 46	11	4	11	11 6	11 26	23	7	28
29	Thursday.	10 28	10 51	23	2	..	0 9	10	0	0	11	11 49	..	21	8	29
30	Friday ..	11 16	11 43	22	4	0	0 36	1 4	8	11	0	0 16	0 44	20	2	30
31	Saturday..	..	0 12	22	0	1	1 32	2 4	8	6	1	1 12	1 44	19	6	31

The above are in Greenwich Mean Time, if local Time be required for
 Barnstaple, *sub.* 17m.—Bridgewater, *sub.* 12m.—Bristol, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 8th, 2h. 39m. a.m. | New Moon .. 22nd, 0h. 19m. p.m.
 Last Quarter . 15th, 9h. 11m. p.m. | First Quarter . 29th, 4h. 38m. p.m.

M. D.	WEEK DAYS.	Briton-Ferry.				Cardiff.				Gloucester.			
		Morn.		Even.		Height		Morn.		Even		Height	
		H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.	H. M.	H. M.	P. I.	P. I.
1	Thursday..	0 15	0 49	15	2	1 1	1 38	21	10	1 54	2 31	17	9
2	Friday ..	1 26	2 15	8		2 13	2 45	22	6	3 6	3 38	18	7
3	Saturday..	2 33	3 16	7		3 15	3 47	23	8	4 8	4 40	20	1
4	Sunday ..	3 31	3 56	17	9	4 17	4 44	25	0	5 10	5 37	21	9
5	Monday..	4 17	4 38	18	7	5 7	5 29	26	1	6 0	6 22	23	1
6	Tuesday..	5 1	5 19	19	2	5 52	6 10	26	11	6 45	7 3	24	1
7	Wednesdy	5 39	5 58	19	7	6 30	6 50	27	5	7 23	7 43	24	9
8	Thursday..	6 16	6 32	19	10	7 8	7 26	27	8	8 1	8 19	25	1
9	Friday ..	6 50	7 7	19	11	7 43	8 0	27	10	8 36	8 53	25	3
10	Saturday..	7 25	7 43	19	9	8 18	8 36	27	6	9 11	9 29	24	11
11	Sunday ..	8 0	8 18	19	4	8 52	9 10	27	0	9 45	10 3	24	3
12	Monday..	8 38	8 59	18	8	9 27	9 46	26	3	10 20	10 39	23	4
13	Tuesday..	9 20	9 41	17	11	10 4	10 24	25	3	10 57	11 17	22	1
14	Wednesdy	10 4	10 26	17	3	10 43	11 3	24	5	11 36	11 56	21	0
15	Thursday..	10 51	11 16	16	7	11 28	11 56	23	8	..	0 21	20	1
16	Friday ..	11 43	..	16	2	..	0 26	23	2	0 49	1 19	19	5
17	Saturday..	0 13	0 45	16	8	0 59	1 34	23	9	1 52	2 27	20	3
18	Sunday ..	1 23	2 0	17	9	2 10	2 44	25	0	3 3	3 37	21	9
19	Monday..	2 35	3 9	19	4	3 17	3 52	27	0	4 10	4 45	24	3
20	Tuesday..	3 41	4 10	20	10	4 28	4 59	29	0	5 21	5 52	26	9
21	Wednesdy	4 41	5 8	21	11	5 31	5 59	30	4	6 24	6 52	28	5
22	Thursday	5 37	6 7	22	3	6 28	6 58	30	9	7 21	7 51	28	11
23	Friday ..	6 32	6 58	22	6	7 26	7 51	31	1	8 19	8 44	29	5
24	Saturday..	7 23	7 46	22	4	8 16	8 39	30	10	9 9	9 32	29	1
25	Sunday ..	8 9	8 31	21	6	9 1	9 21	29	9	9 54	10 14	27	9
26	Monday..	8 54	9 17	20	5	9 42	10 2	28	6	10 35	10 55	26	1
27	Tuesday..	9 39	10 0	19	2	10 22	10 39	26	11	11 15	11 32	24	1
28	Wednesdy	10 20	10 41	17	10	10 58	11 18	25	2	11 51	..	21	11
29	Thursday	11 3	11 26	16	6	11 41	..	23	6	0 11	0 34	19	11
30	Friday ..	11 51	..	15	5	0 8	0 36	22	3	1 1	1 29	18	4
31	Saturday..	0 18	0 47	15	0	1 4	1 36	21	8	1 57	2 29	17	7

The above are in Greenwich Mean Time, if local Time be required for
 Briton-Ferry, *sub.* 15m.—Cardiff, *sub.* 13m.—Gloucester, *sub.* 10m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 8th, 2h. 39m. a.m. | New Moon .. 22nd, 0h. 19m. p.m.
 Last Quarter. 15th, 9h. 11m. p.m. | First Quarter. 29th, 4h. 38m. p.m.

M. D.	WEEK DAYS.	Ilfracombe.				Llanelly.				Milford Haven.			
		Morn.		Even.		Height		Morn.		Even.		Height	
		H.	M.	H.	M.	F.	I.	H.	M.	H.	M.	F.	I.
1	Thursday.	..		0	24	15	5	0	25	0	59	15	7
2	Friday ..	1	1	1	36	15	10	1	36	2	11	16	0
3	Saturday.	2	8	2	38	16	8	2	43	3	13	17	9
4	Sunday ..	3	6	3	31	17	8	3	41	4	6	17	8
5	Monday..	3	52	4	13	18	5	4	27	4	48	18	4
6	Tuesday..	4	36	4	54	18	11	5	11	5	29	19	5
7	Wednesday	5	14	5	33	19	3	5	49	6	8	19	9
8	Thursday.	5	51	6	7	19	6	6	26	6	42	20	0
9	Friday ..	6	24	6	42	19	7	7	0	7	17	20	1
10	Saturday.	7	0	7	18	19	5	7	35	7	53	19	11
11	Sunday ..	7	35	7	53	19	0	8	10	8	28	19	6
12	Monday..	8	13	8	34	18	6	8	48	9	9	19	0
13	Tuesday..	8	55	9	16	17	10	9	30	9	51	18	4
14	Wednesday	9	39	10	1	17	3	10	14	10	36	17	9
15	Thursday.	10	26	10	51	16	8	11	1	11	26	17	2
16	Friday ..	11	18	11	45	16	3	11	53	..		16	9
17	Saturday.	..		0	20	16	9	0	23	0	55	17	3
18	Sunday ..	0	58	1	35	17	8	1	33	2	10	18	2
19	Monday..	2	10	2	44	19	0	2	45	3	19	19	6
20	Tuesday..	3	16	3	45	20	4	3	51	4	20	20	10
21	Wednesday	4	16	4	43	21	4	4	51	5	18	21	10
22	Thursday.	5	12	5	42	21	7	5	47	6	17	22	1
23	Friday ..	6	7	6	33	21	10	6	42	7	8	22	4
24	Saturday..	6	58	7	21	21	8	7	33	7	56	22	2
25	Sunday ..	7	44	8	6	20	11	8	19	8	41	21	5
26	Monday..	8	29	8	52	20	0	9	4	9	27	20	6
27	Tuesday..	9	14	9	35	18	11	9	49	10	10	19	5
28	Wednesday	9	55	10	16	17	9	10	30	10	51	18	3
29	Thursday.	10	38	11	1	16	7	11	13	11	36	17	1
30	Friday ..	11	26	11	53	15	8	..		0	1	16	2
31	Saturday..	..		0	22	15	3	0	28	0	57	15	9

The above are in Greenwich Mean Time, if local Time be required for Ilfracombe, *sub.* 16m.—Llanelly, *sub.* 16m.—Milford Haven, *sub.* 20m.

For further explanations, see page 17.

PHASES OF THE MOON.

Full Moon .. 8th, 2h. 39m. a.m. | New Moon .. 22nd, 0h. 19m. p.m.
 Last Quarter . 15th, 9h. 11m. p.m. | First Quarter. 29th, 4h. 38m. p.m.

M. D.	W. D.	Newport.					Swansea.					Liverpool.				London.			
		Morn.		Even.		Height	Morn.		Even.		Height	Morn.		Even.		Morn.		Even.	
		H. M.	H. M.	H. M.	F. I.		H. M.	H. M.	H. M.	F. I.		H. M.	H. M.	H. M.		H. M.	H. M.	H. M.	
1	Th	1 9	1 46	20	1		0 15	0 49	16	2		5 57	6 39	8 34	9 13				
2	Fri	2 21	2 53	20	11		1 26	2 1	16	8		7 14	7 45	9 49	10 23				
3	Sat	3 23	3 55	22	3		2 33	3 3	17	7		8 12	8 38	10 55	11 24				
4	Sun	4 25	4 52	23	9		3 31	3 56	18	9		9 2	9 24	11 51	..				
5	Mo	5 15	5 37	25	0		4 17	4 38	19	7		9 41	9 59	0 16	0 38				
6	Tu	6 0	6 18	26	0		5 1	5 19	20	2		10 18	10 33	0 56	1 15				
7	Wd	6 38	6 58	26	7		5 39	5 58	20	7		10 51	11 9	1 35	1 51				
8	Th	7 16	7 34	26	11		6 16	6 32	20	10		11 26	11 43	2 8	2 25				
9	Fri	7 51	8 8	27	1		6 50	7 7	20	11		12 0	..	2 42	2 58				
10	Sat	8 26	8 44	26	9		7 25	7 43	20	9		0 18	0 36	3 15	3 32				
11	Sun	9 0	9 18	26	1		8 0	8 18	20	4		0 55	1 12	3 49	4 7				
12	Mo	9 35	9 54	25	2		8 38	8 59	19	8		1 30	1 49	4 24	4 42				
13	Tu	10 12	10 32	24	0		9 20	9 41	18	11		2 9	2 30	5 1	5 22				
14	Wd	10 51	11 11	23	1		10 4	10 26	18	3		2 52	3 17	5 43	6 7				
15	Th	11 36	..	22	3		10 51	11 16	17	7		3 41	4 11	6 33	6 58				
16	Fri	0 4	0 34	21	8		11 43	..	17	2		4 43	5 18	7 28	8 0				
17	Sat	1 7	1 42	22	5		0 13	0 45	17	8		5 55	6 34	8 34	9 11				
18	Sun	2 18	2 52	23	9		1 23	2 0	18	9		7 11	7 44	9 45	10 20				
19	Mo	3 25	4 0	26	1		2 35	3 9	20	4		8 14	8 43	10 54	11 26				
20	Tu	4 36	5 7	28	4		3 41	4 10	21	10		9 11	9 35	11 56	..				
21	Wd	5 39	6 7	29	11		4 41	5 8	22	11		10 1	10 24	0 25	0 50				
22	Th	6 36	7 6	30	4		5 37	6 7	23	3		10 49	11 17	1 17	1 41				
23	Fri	7 34	7 59	30	9		6 32	6 58	23	6		11 43	..	2 6	2 33				
24	Sat	8 24	8 47	30	6		7 23	7 46	23	4		0 9	0 34	2 58	3 23				
25	Sun	9 9	9 29	29	3		8 9	8 31	22	6		0 58	1 21	3 47	4 10				
26	Mo	9 50	10 10	27	10		8 54	9 17	21	5		1 42	2 4	4 33	4 54				
27	Tu	10 30	10 47	26	0		9 39	10 0	20	2		2 27	2 50	5 17	5 40				
28	Wd	11 6	11 26	23	11		10 20	10 41	18	10		3 12	3 34	6 5	6 28				
29	Th	11 49	..	22	1		11 3	11 26	17	6		3 59	4 26	6 51	7 16				
30	Fri	0 16	0 44	20	7		11 51	..	16	5		4 57	5 28	7 43	8 13				
31	Sat	1 12	1 44	19	11		0 18	0 47	16	0		6 0	6 36	8 45	9 16				

The above are in Greenwich Mean Time, if local time be required for
 Newport, *sub.* 12m.—Swansea, *sub.* 15m.—Liverpool, *sub.* 12m.

For further explanations, see page 17.

PORT CHARGES, &c.

APPLEDORE.

Mooring, 1s.

Pilotage, as per agreement.

BARNSTAPLE.

Keelage, 4d. per Vessel, large or small. Pilotage, as per agreement.

BIDEFORD.

Harbour Dues.—Vessels discharging at public quay, $\frac{1}{4}$ d. per ton register; Anchorage, 2s. 6d. Pilotage, as per agreement.

BRIDGEWATER.

Definition of Limits.

Within such parts of the Bristol Channel, and adjacent Rivers and Creeks, as lie on the south-east side of, and are comprised within an imaginary straight line drawn from Anchor Head, in the county of Somerset, on the east, to Watchet, in the same county, on the west.

Rates of Pilotage.

From the extreme limits of the navigation, or from any point between such extreme limits and the outer buoy of the Gore Sand, to the town, or to any point between the Black Rock and the town, vessel being safely moored;—

Also from the town to the limits of the navigation, or to any point between the outer buoy of the Gore Sand and the said limits, the following rates, viz. :—

		s.	d.	
On vessels not exceeding 60 tons register		12	0	per vessel.
" Exceeding 60 tons, and not exceeding 80 tons	1	3	} Per foot of the vessel's draft of water.
" " 80 " 100	..	2	0	
" " 100 " 125	..	3	0	
" " 125 " 150	..	4	0	
" " 150 " 200	..	5	0	
" " 200 " 250	..	6	6	
" " 250 tons	8	0	

From the outer buoy of the Gore Sand, or from any point between such Buoy and Burnham Church, to the town, or to any point between the Black Rock and the town, the vessel being safely moored.

Also from the town to the outer buoy of the Gore Sand, or to any point between Burnham Church and the said buoy.

Bridgewater, continued.

On vessels not exceeding 60 tons register	s. d.	9 0	per vessel.
" Exceeding 60 tons, and not exceeding 80 tons	1 0		
" " 80 " 100 ..	1 6		Per foot of the vessel's draft of water.
" " 100 " 125 ..	2 0		
" " 125 " 150 ..	3 0		
" " 150 " 200 ..	4 0		
" " 200 " 250 ..	5 6		
" " 250 tons	7 0		
From Burnham Church, or from any point between Burnham Church and the town, to the town, or to any immediate point, the vessel being safely moored, and <i>vice versa</i> .			
On vessels not exceeding 60 tons register	s. d.	6 0	per vessel.
" Exceeding 60 tons, and not exceeding 80 tons	0 9		
" " 80 " 100 ..	1 0		Per foot of the vessel's draft of water.
" " 100 " 125 ..	1 6		
" " 125 " 150 ..	2 0		
" " 150 " 200 ..	3 0		
" " 200 " 250 ..	4 6		
" " 250 tons	6 0		

No vessel exceeding 60 tons register to pay for less than ten feet.

The several Pilotage Rates herein specified are subject to a reduction of one-fourth part, in respect of vessels propelled by steam and vessels towed by steam vessels, provided that if any such vessel shall be propelled by steam, or towed by a steam vessel for a part only of the distance for which any such rate may be payable, the reduction of one-fourth shall be made on such part only of the said rate as shall be proportionate to the distance so propelled or towed.

Towage.

	Vessels under 10ft. draftwater per ton register.	Vessels under 11ft. draftwater per ton register.	Vessels under 12ft. draftwater per ton register.	Vessels above 12ft. draftwater per ton register.
To or from Burnham, Black Rock, or any intermediate place, to or from Bridgewater, one tide's work....	s. d. 0 3	s. d. 0 4	s. d. 0 5	s. d. 0 6
To or from Burnham to Black Rock, Dunball, or Cumbwich, one tide's work	0 1½	0 2	0 3	0 3
To or from Burnham and Highbridge, one tide's work	0 2	0 4	0 5	0 6
Harbour Dues.—One penny per ton register, with 1s. fee for moorage.				

*Bridgewater, continued.***Tonnage Rates.***First Class.*—Vessels entering with cargoes or departing with cargoes—

INWARDS. —For every ship or other vessel which shall enter the said basin, from any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney and Sark—per ton measurement ...	0 3
From any other part of Europe except places within the Straits of Gibraltar and round the North Cape, and from all British Colonies—per ton measurement...	0 4
From any port or place in Europe round the North Cape, any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa, and any port or place in the United States of America—per ton measurement ...	0 6
From any port or place in any other part of the world—per ton measurement ...	0 8

OUTWARDS. —For every ship or vessel which shall depart from the said basin to any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney and Sark—per ton measurement ...	1 0
To any other port of Europe except places within the Straits of Gibraltar, and round the North Cape, or to any British Colony—per ton measurement ...	0 4
To any port or place in Europe round the North Cape, any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa; any port or place in the United States of America—per ton measurement ...	0 6
To any port or place in any part of the world—per ton measurement ...	0 8

Second Class.—Vessels entering without cargoes or in ballast—

For every ship or other vessel which shall enter into the said basin—per ton measurement ...	0 2
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<i>Third Class.</i> —For every ship or other vessel with a cargo which shall enter the said basin and depart therefrom without breaking bulk, or which shall discharge and afterwards take on board and depart with the same cargo—per ton measurement ...	0 4
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And in estimating the dues contained in the schedule, every vessel of less burthen than twenty tons measurement, shall be rated at twenty tons measurement.

Extra basin dues for overtime—For every coal vessel remaining in the basin beyond ten days, for every coasting vessel beyond fourteen days, and for every foreign vessel beyond thirty days from the time of their respectively entering the same—per ton measurement, per month ...	0 3
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BRISTOL.

Rates or Fares for Pilotage.

	If 80 and under 100 tons.		If 100 and under 200 tons.		If 200 and under 300 tons.		If 300 and under 500 tons.		If 500 and under 600 tons.		If 600 and under 800 tons.		If 800 and under 1000 tons.		If 1000 tons and upwards.	
	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.
BETWEEN																
Lundy and Coombe	1	1 0	1	8	1	15 0	2	2	2	9 0	2	16	3	3 0	3	10
Lundy and Swansea or Minehead	2	2 0	2	16	3	10 0	4	4	4	18 0	5	12	6	6 0	7	0
Lundy and Bridgewater, Cardiff, or the Holmes	2	12 6	3	10	4	7 6	5	5	6	2 6	7	0	7	17 6	8	15
Lundy and Newport or Kingroad	3	3 0	4	4	5	5 0	6	6	7	7 0	8	8	9	9 0	10	10
Coombe and Minehead	1	1 0	1	8	1	15 0	2	2	2	9 0	2	16	3	3 0	3	10
Coombe and Bridgewater, Cardiff, or the Holmes	1	11 6	2	2	2	12 6	3	3	3	13 6	4	4	4	14 6	5	5
Coombe and Newport or Kingroad	2	2 0	2	16	3	10 0	4	4	4	18 0	5	12	6	6 0	7	0
Minehead and Bridgewater, Cardiff, or the Holmes	0	10 6	0	14	0	17 6	1	1	1	4 6	1	8	1	11 6	1	15
Minehead and Newport or Kingroad ..	1	1 0	1	8	1	15 0	2	2	2	9 0	2	16	3	3 0	3	10
Between any of the following places:— Portishead, Kingroad, Hungroad, Broad Pill, Cumberland or Bathurst Basins, and any other of such places*	0	10 0	0	15	1	0 0	1	5	1	10 0	1	16	2	0 0	2	5
Between any two of the following places, viz:—Bridgewater, Cardiff, the Holmes, Newport and Kingroad	0	10 6	0	14	0	17 6	1	1	1	4 6	1	8	1	11 6	1	15

* If under 80 tons, 7s. 6d.

*Bristol, continued.***Harbour Dues.****£ s. d.**

For every vessel trading from Africa, Honduras, Surinam, and other ports in South America, the United States of America, the East and West Indies, all the ports within the Straits of Gibraltar, the Southern Whale Fishery, the British Colonies, Portugal, Prussia, Russia, Spain, without the Straits, and Sweden—per ton	0	1	2
For every vessel trading from Flanders, France, without the Straits, Germany, Guernsey, Holland, Jersey, Norway, Poland, and Zealand—per ton	0	0	7
For every vessel trading from Ireland, the Isle of Man, Scotland, or as a Coaster, not including vessels from Cardiff, Newport, and other ports to the eastward of the Holmes—per ton	0	0	5
For every vessel from Cardiff, Newport, or any other port to the eastward of the Holmes (not being vessels one-third part of the lading of which shall consist of coal, scroff, iron, tin, tin plates, grain, copper, bricks, stone-coal, tar, slate, bar, timber, or wood), as follows:—			
If such vessel shall be under forty tons burthen—for each voyage	0	7	6
If such vessel shall be forty tons burthen, and under seventy-five tons—for each voyage	0	12	6
If such vessel shall be seventy-five tons burthen, and under one hundred tons—for each voyage	0	16	0
If such vessel shall be one hundred tons burthen or upwards—for each voyage	1	1	0
For every vessel from Cardiff, Newport, or any other port to the eastward of the Holmes, one-third part of the lading of which shall consist of coal, scroff, iron, tin, tin plates, grain, copper, bricks, stone-coal, tar, slate, bark, timber, or wood, as follows:—			
If such a vessel shall not exceed seventy-five tons burthen for each voyage	0	5	0
If such vessel shall exceed seventy-five tons burthen—for each voyage	0	7	6
N.B.—There are no Dock Rates or other Port Charges payable on vessels leaving the port of Bristol.			

BRITON FERRY.**Pilotage.****From outside of Neath Bar.**

Vessels under 40 tons register	7s.	0d.
Vessels over 40 and under 60 tons register.....	10s.	0d.
With or without steam.		

Briton Ferry, continued.

For vessels over 60 tons register the rates are as follows:—

Draught of Water.	Without Steam.			With Steam.			Draught of Water.	Without Steam.			With Steam.		
	£.	s.	d.	£.	s.	d.		£.	s.	d.	£.	s.	d.
8 feet..	0	11	3	0	8	5	13½ ft. ..	1	2	6	0	16	11
8½ „ ..	0	12	0	0	9	0	14 „ ..	1	8	0	1	1	0
9 „ ..	0	12	6	0	9	5	14½ „ ..	1	13	6	1	5	2
9½ „ ..	0	13	0	0	9	9	15 „ ..	2	1	6	1	11	2
10 „ ..	0	13	6	0	10	2	15½ „ ..	2	10	6	1	18	0
10½ „ ..	0	14	0	0	10	6	16 „ ..	3	1	0	2	5	9
11 „ ..	0	14	6	0	10	11	16½ „ ..	3	12	0	2	14	0
11½ „ ..	0	15	9	0	11	10	17 „ ..	4	5	6	3	4	2
12 „ ..	0	16	10	0	12	8	17½ „ ..	4	19	0	3	14	3
12½ „ ..	0	18	6	0	14	2	18 „ ..	5	13	0	4	5	0
13 „ ..	1	0	6	0	15	5	And 10s. for every ½ ft. over 18 ft.						

Towage.

INWARDS.—Vessels up to 150 tons register....per ton register 1½d.
 " " " " and upwards " 2d.
 OUTWARDS.—All tonnages alike 2d.
 Subject to the general towage regulations of the port.

Harbour Dues.

Coastwise or Foreign..... 1½d. per ton register.
 Layage..... 1s. 6d. each vessel.

Loading Charges.

Trimming coal, on cargo 2½d. per ton.

Discharging Ballast.

Without reference to quantity—about 1½d. per ton on cargo.

BURRY PORT.**Harbour Dues.**

For every ship, barge, boat, or other vessel, coming into or going out of the harbour of Burry Port, according to its tonnage, the sum of 4d. per ton.

For every ship, barge, boat, or other vessel, running into the inner harbour by stress of weather, and not unloading, the sum of 6d. per ton, and the outer harbour, the sum of 4d. per ton.

Burry Port, continued.

For every ship, barge, boat, or other vessel coming into the inner harbour from stress of weather, and lying longer than seven days, the sum of 3d. per ton per day; and into the outer harbour, the sum of 2d. per ton per day.

Stemming Rates.

Vessels not exceeding 20 tons register, 6d.; 50 tons, 1s.; 70 tons, 1s. 6d.; 100 tons, 2s.; exceeding 100 tons, 2s. 6d.

Ballast.

For wheeling, per ton register, outer harbour, 1d.; inner harbour 1½d.

For use of planks, barrows, and waggons—

	s.	d.		s.	d.
Not above 100 tons register	1	6	Not above 350 tons register	3	6
" 150 "	2	0	" 400 "	4	0
" 200 "	2	6	Above 400 "	4	6
" 300 "	3	0			

Men to be allowed 1s. for assisting to trip the basket, and the same extra charges for the use of crane and tubs, if required.

For Pilotage, see Llanelly.

BURNHAM.

Harbour Dues, 1d. per ton register, with 1s. fee for moorage.

Beacons, 4s. per vessel.

Tolls, on coasting vessels, similar to those at Bridgewater;
on foreign trade vessels, 3d. per ton extra.

Pilotage, as per agreement.

CARDIFF.**Pilotage Rates.**

The limit of this Pilotage is the Port of Cardiff and that portion of the Bristol Channel which lies eastward of Lundy Island, up to, and including, Kingroad and the River Rhymney, to Rhymney Bridge. This Pilotage is not compulsory, but may be obtained over all or any portion of this district, at the discretion of the Masters of Vessels.

Harbour Pilotage.—Every licensed Pilot employed in taking a ship or vessel between any dock or harbour in the port of Cardiff and any point in Cardiff Roads, or *vice versa*, shall be paid according to the registered tonnage of such vessel, as follows:—

Cardiff, continued.

FOR LADEN VESSELS.				£	s.	d.
If under 60 tons.....				0	5	0
60 tons and under 100 tons				0	7	6
100	„	150 tons	....	0	10	0
150	„	200 tons	....	0	12	6
200	„	250 tons	....	0	15	0
250	„	300 tons	....	0	17	6
300	„	400 tons	....	1	1	0
400	„	500 tons	....	1	5	0
500	„	600 tons	....	1	7	6
600	„	800 tons	....	1	10	0
800	„	1000 tons	....	1	15	0
1000	„	1250 tons	....	2	10	0
1250 tons and upwards.....				3	0	0

Channel Pilotage.—Any ship or vessel sailing to and from the port of Cardiff, upon or in the water of the Bristol Channel between Lundy Island and Kingroad, for which the services of a duly licensed pilot may be required and rendered, shall pay according to the registered tonnage of such vessel, as follows:—

FOR LADEN VESSELS.

	1st Limit.			2nd Limit.			3rd Limit.		
	£	s.	d.	£	s.	d.	£	s.	d.
If under 150 tons	0	15	0	1	5	0	2	0	0
150 tons and under 200 tons ..	0	17	6	1	10	0	2	7	6
200 „ 300 tons ..	1	0	0	1	17	6	2	17	6
300 „ 400 tons ..	1	5	0	2	5	0	3	5	0
400 „ 500 tons ..	1	7	6	2	10	0	3	10	0
500 „ 600 tons ..	1	10	0	2	15	0	4	0	0
600 „ 800 tons ..	1	15	0	3	0	0	4	7	6
800 „ 1000 tons ..	2	0	0	3	15	0	5	10	0
1000 „ 1250 tons ..	2	10	0	4	15	0	7	0	0
1250 tons and upwards.....	3	0	0	5	15	0	8	10	0

FIRST LIMIT.—Between Cardiff Roads and Nash or Kingroad, or any point east of Nash and west of Kingroad.

SECOND LIMIT.—Between Cardiff Roads and Combe, or any point west of Nash and east of Combe.

THIRD LIMIT.—Between Cardiff Roads and Lundy Island, or any point west of Combe.

Any pilot who may be required to remain on board any ship or vessel for the convenience of the captain, master, owner, or agent, after he shall have discharged the duties for which he was engaged, shall be paid ten shillings per day for every day he may be employed.

Cardiff, continued.

and any pilot who may be required to move any ship or vessel from one dock or tidal harbour to another dock or tidal harbour, occupying only one tide, shall be paid for every ship—

		s.	d.
Not exceeding 100 tons register	.....	5	0
100 and not exceeding 300	.....	10	0
300 500	.....	12	6
500 800	.....	17	6
800 and upwards.....	.....	25	0

Towage.

Inwards, in ballast	.....	1½d. per ton register.
" with cargo	.....	2d. "
Outwards "	.....	2d. per ton.

Town Dues.

Under 60 tons register.....	2s. 6d. per vessel
Above 60 tons register.....	5s. 0d. "

Loading Charges.

Trimming coal (single deck)	2½d. per ton cargo
" (double deck).....	3d. "
Wharfage on cargo	2d. "

Discharging Ballast.

Vessels under 200 tons	5d. per ton on quantity.
200 tons and under 400 tons.....	6d. "
400 600 tons.....	7d. "
600 800 tons.....	8d. "
800 tons and upwards	9d. "

Tonnage Rates.—Bute Docks.

FIRST CLASS. —On all sailing, steam, or other vessels entering from or departing for any port in the United Kingdom, Isle of Man, Jersey, Guernsey, Alderney, and Sark, under 100 tons register	per register ton	0	1½
100 tons and under 200 tons register.....	ditto	0	2
200 tons register and upwards (except steam vessels) ditto	ditto	0	3
Steam vessels 200 tons register and upwards	ditto	0	2
SECOND CLASS. —On all sailing, steam, or other vessels entering from or departing for any port in Europe, between the North Cape and Cape Finisterre.....	per register ton	0	5
THIRD CLASS. —On all sailing, steam, or other vessels entering from or departing for any other port in Europe and the Mediterranean	per register ton	0	7

Cardiff, continued.

FOURTH CLASS.—On all sailing, steam, or other vessels entering from or departing for all other foreign ports whatsoever, per register ton 0 9

FIFTH CLASS.—On all sailing, steam, or other vessels which do not enter within the gates of any dock or basin, but which either discharge or receive passengers or goods upon or from any pier, landing-place, or jetty per register ton 0 3

SIXTH CLASS.—On all sailing, steam, or other vessels using the Tidal Harbour of the undertakers..... per register ton 0 0½

If any sailing, steam, or other vessel, being of less than 200 tons measurement, shall remain within any dock or basin for a period longer than ten days; or being of 200 tons and less than 400 tons measurement, for a longer period than fourteen days; or being of 400 tons measurement or upwards, for a period longer than twenty-one days, then for the period during which the vessel remains beyond those periods respectively, the further rates following (that is to say):

For the first week or any part thereof.... per register ton 0 1

For the second week, or any part thereofditto 0 1½

For every week, or part of a week, beyond the second week.....ditto 0 2

Penarth Harbour, Dock and Railway.**Harbour Dues.**

Vessels not exceeding 200 tons register, per ton register ½d.

Vessels above ditto 1d.

Ballast Rates.

Under 100 tons register, 5d. per ton of ballast discharged.

100 tons and under 200 6d. „

200 „ 400 7d. „

400 „ 600 8d. „

600 „ 800 9d. „

800 tons and upwards.. 10d. „

Discharging by night 3d. per ton extra on the quantity so discharged.

The Dock Dues and Charges are the same as at the Bute Docks, Cardiff.

CARMARTHEN.**Harbour Dues.**

	s.	d.		s.	d.
Vessels under 30 tons	1	0	Vessels 80 to 90 tons	2	6
30 to 60 tons	1	6	90 to 110 tons	3	0
60 to 80 tons	2	0	110 tons and upwards	5	0

Pilotage as per agreement.

CHEPSTOW.**Harbour Dues.**

One penny per ton register on all vessels loading or unloading alongside a wharf; also on all vessels entering or departing the river, if from or to the eastward of the Holmes, 4d.; from or to the westward of the Holmes, 2s. 4d.

Pilotage.—The same as at Gloucester.

CLOVELLY.**Harbour Dues.**

Vessels not exceeding 20 tons, 1s.; 20 to 50 tons, 2s.; above 50 tons $\frac{1}{2}$ d. per ton.

Pilotage, &c., as per agreement.

GLOUCESTER & BERKELEY CANAL.**Rates of Tonnage.**

Charged upon gross and REGISTER weight, and on the ton of 20 cwt. of 112 lbs.

IMPORTS.				Foreign		Coast-wise.	
				s.	d.	s.	d.
ALE, beer, porter, cider and perry, per brl. of 36 galls.				0	4	0	4
—ditto, in bottle	per dozen			0	1	0	1
Barilla	per ton			1	6	1	0
Bricks, for building	per 1000			2	0	2	0
— scouring, fire, and tiles	per ton			2	0	1	0
Brimstone	"			1	6	1	0
Bones and bone ash	"			1	0	1	0
Burr stones	"			1	6	1	0
Clay	"			0	6	0	6
Coals	"			0	6	0	6
CORN AND MEAL—							
Wheat, and all corn and seed	"			1	9	1	6
Flour and other meal	"			2	0	2	0
Bran, gurgeons, and shudes	"			1	6	1	6
Earths	"			1	0	1	0
Gunpowder	"			5	0	5	0
Kelp	"			1	6	1	6
Marble	per ton of 14 cubic ft.			1	6	1	0
Manures	per ton			1	0	1	0
METALS AND ORES—							
Copper, spelter, tin, zinc and maganese	"			2	0	0	9
Metallic ores	"			0	9	0	6
Pig iron, and old or loose iron	"			2	0	0	9
All other descriptions of iron	"			2	0	0	9

*Gloucester and Berkeley Canal, continued.*IMPORTS, *continued.*

				Foreign.		Coast- ing.	
				s.	d.	s.	d.
Oil cake and locust beans	..	..	per ton	1	6	1	0
Potatoes	..	..	"	1	0	1	0
Slates, for roofing	..	..	"	2	0	1	6
" for draining	..	..	"	2	0	1	0
" slabs, for paving, &c.	..	..	"	2	0	1	0
Stone, for roads, pitching, lime, chalk, flint,							
gravel, and sand	..	..	"	0	6	0	6
for building, block, paving, &c.	..	..	"	1	0	1	0
burr stones	..	..	"	1	6	1	0
SPIRITS and WINE—	..	..	per pipe, pun. or butt	2	6	2	6
" " "	..	..	per half ditto, or hogshead	1	3	1	3
" " "	..	..	all casks under	0	6	0	6
in bottle	..	..	per dozen	0	1	0	1
WOOD AND WOOD GOODS—							
Mahogany and fine wood*	..	..	per ton	2	0	2	0
Other timber and poles†	..	..	"	1	6	1	6
Lathwood	..	..	per fathom of 4 feet	2	0	2	0
Deals and battens, per Petersburg standard of							
120, 12ft. long, 11 in. wide, and 1½ in. thick				3	4	3	4
Staves, Baltic pipe	..	..	per 120	3	6	3	6
Puncheon and hogshead	..	..	"	3	0	3	0
Quebec standard	..	..	"	1	6	1	6
Barrel	..	..	"	1	0	1	0
West India pun	..	..	"	0	6	0	6
New Brunswick small	..	..	"	0	3	0	3
Laths	..	..	per 1000	0	4	0	4
UNENUMERATED ARTICLES	..	..	per ton	2	0	1	0

EXPORTS.

Bricks of all kinds	..	..	per ton	0	6	0	6
Clays	..	..	"	0	6	0	6
Coals	..	..	"	0	3	0	3
Corn, flour, and meal..	..	..	"	0	6	0	6
METALS AND ORES—							
Metallic ores	..	..	"	0	6	0	6
"Puddle-bars," pig-iron, and rough							
cast-iron pipes	..	..	"	0	6	0	6
All other descriptions of iron and metal				0	6	0	9
Salt	..	..	"	0	6	0	6
UNENUMERATED ARTICLES	..	..	"	0	6	1	0

* Mahogany, Oak, Ash, Elm, Beech, and other heavy Timber or Wood, 40 feet to the ton.

† Fir, Pine, Deal, and light woods, 50 feet to the ton.

*Gloucester and Berkeley Canal, continued.***Regulations.**

Tonnage.—One-half of the above Rates shall be charged upon goods conveyed along any part of the canal between the Stroud Junction and Sharpness Point, or the Stroud Junction and Gloucester, excepting goods coming under the operation of the 8th, 9th, or 10th regulations.

If it be proved to the satisfaction of the toll collectors that the full rate of tonnage has been paid upon any goods which have passed along the canal, half the full tonnage only shall be charged on such goods repassing along the canal, unless such half rate shall exceed the amount of the export rate, in which case the export rate upon such goods shall be charged.

All goods brought into the canal for sale, and not sold, and then exported in the same bottom, without being landed, shall only be charged with the import rate.

All goods exported in the same bottom from Sharpness Point, or transhipped there direct for export, shall only be charged with the import rate.

All goods brought into the canal, forming part of a cargo, the original destination of such goods being for any other port than Gloucester, and not landed nor transhipped, shall pass in and out of the canal free of charge, the vessel carrying such goods paying lockage.

All vessels partly laden entering the canal at Sharpness or Gloucester, to complete their cargoes, shall only be charged tonnage rates on the merchandize shipped in the canal, and the usual lockage charges; provided such inward lading is not landed nor transhipped.

All goods brought into the canal at Gloucester or Sharpness, either by land or water conveyance, and intended for exportation, shall not be charged the tonnage rates until shipped.

All corn brought to Gloucester from Stroud by the canal shall pay a rate of 4d. per ton; and all Flour, Bran, and Gurgeons so brought shall pay a rate of 6d. per ton.

All goods brought into the canal at Gloucester, by the Severn, from places above Gloucester, or to the docks at Gloucester, by land carriage, and not conveyed upon the canal below Hempstead Bridge, except goods coming under the 10th regulation, shall pay a rate of 4d. per ton, or the rate by the table, if it be less than 4d.

All goods simply crossing the canal from the South Wales Railway Quay to the yards on the opposite side, lying to the north of the Salt Warehouses, or *vice versa*, not having previously paid canal dues, shall pay a rate of 2d. per ton.

Wharfage.—Goods remaining upon the wharfs (except the wharf specified in the foregoing regulation) for above *forty-eight hours*,

Gloucester and Berkeley Canal, continued.

twopence per ton. And all goods remaining upon any of the wharfs, except the north wharf, shall be further charged wharfage at the rate of *twopence* per ton per week, and at that rate for any part of a week they may so remain after the expiration of the forty-eight hours. And all goods remaining upon the "*North Wharf*," shall be further charged wharfage at the rate of *one shilling* per ton per week, and at that rate for any part of a week they may so remain after the expiration of the forty-eight hours.

All goods deposited upon the wharf underneath the "*Pillar Warehouse*," upon the west side of the basin, and remaining there longer than twenty-four hours, shall be charged 1d. per ton per day.

Goods, carriages of every description, and all other things shall only be placed on the wharfs, roads, and premises of the Canal Company in such manner, and on such parts thereof, as the officers of the Company may direct; and if any goods, carriages, or other things shall be placed contrary to their directions, the officers of the Company may remove the same; and wharfage at the rate of 6d. per ton per hour shall be charged after notice shall have been given to remove the same.

Floatage of Timber.—For timber discharged from vessels into the canal, on the south side of "*Siller's Bridge*," and remaining afloat on the south side of such bridge after the expiration of thirty days, a floatage rate of one halfpenny per stick per week shall be paid, and in like proportion for any part of a week; and if such timber should be removed to any part of the canal on the north side of such bridge, a floatage rate of 1d. per stick for the first week after such removal, and 2d per stick per week afterwards, and in like proportion for any part of a week, shall be paid.

For timber discharged from vessels into the canal on the north side of "*Siller's Bridge*," and remaining afloat on the north side of such bridge after the expiration of fifteen days, a floatage rate of 1d. per stick per week shall be paid, and in like proportion for any part of a week; and should it remain afloat on the north side of such bridge longer than twenty-eight days, after the fifteen days, 2d. per stick per week, and in like proportion for any part of a week, shall be paid.

All timber sold and delivered from one merchant to another, and put into the canal from the yards, and floating in the canal on basins two weeks following, shall pay 2d. per stick per week, and in like proportion for the whole time it may remain afloat. And all timber imported in trows or barges discharged into the canal shall be subject to the same regulation and charge.

No timber shall be permitted to remain afloat so as to endanger the navigation of any vessel along the canal, or interrupt or render inconvenient the navigation of the canal.

*Gloucester and Berkeley Canal, continued.***Crannage.**

			£	s.	d.	
For each lift under	2 tons	...	0	0	3	per ton.
2 tons and under	5 "	...	0	0	6	"
5 "	7 "	...	0	1	0	"
7 "	10 "	...	0	1	6	"

All lifts exceeding 10 tons can only be made by special agreement with the Company, and at rates not less than the following scale:—

			£	s.	d.	
10 tons and under	11 tons	...	2	0	0	for each lift.
11 "	12 "	...	2	10	0	"
12 "	13 "	...	3	0	0	"
13 "	14 "	...	3	10	0	"
14 "	15 "	...	4	0	0	"

Lockage.—Every vessel passing through the Company's locks, empty or in ballast, shall pay 1d. per ton on the register tonnage for each lock of water; and every vessel bringing into, or conveying along the canal, a less quantity of goods than her register tonnage, shall pay 1d. per ton per lock on the difference between the tonnage of the goods on board and the register tonnage of the vessel,—provided that the hold of the vessel is not full.

In all cases of removal of goods, wares, and merchandise, from the Company's wharfs or docks, through the locks, upon which the above rates of tonnage have been paid, such further payment only shall be made as will amount to 1d. per ton on the register tonnage of the vessel departing with such goods.

Moorage.—All vessels remaining in the canal or basins longer than one calendar month, shall be charged upon the register tonnage the following rates, viz.:—one halfpenny per ton per week, if such vessels shall be moored or remain on the north side of Hempstead Bridge; and one farthing per ton per week if moored or remaining in any part of the canal below Hempstead Bridge.

Lockage and Moorage.—Boats and vessels under twenty tons burthen shall be rated as twenty tons.

Weighing Machine Rates.—For coal, manure, stone, and gravel, 2d. per ton; all other goods 3d. per ton.

Tracking.—The following scale of charges shall be paid by the masters of vessels for tracking, viz.:—

*Gloucester and Berkeley Canal, continued.**For the whole length of the Canal :*

For vessels under 26 tons.....	8s. 6d. each way.
„ above 26 and not exceeding 150 tons, 4d. per ton.	
„ above 150 { for 150 tons.....	4d. „
{ for the remainder	2½d. „
One-half of the above rates shall be paid to and from the Junction, and ¼d. per ton per mile for all intermediate distances.	

Ballast.

	s.	d.
If put on board at the Ballast Banks.....	0	8 per ton.
If brought in carts, or alongside afloat, either at Gloucester, or within two miles thereof	1	0 „
If thus taken in carts or afloat at any other part of the canal	1	2 „
If in the Tidal Basin at Sharpness.....	1	6 „
All Ballast not supplied by the Ballast Contractor will be charged tonnage at the rate of 6d. per ton.		

Canal Pilotage.

The Canal Pilots are authorized to demand and take the following charges for Piloting Vessels up or down the Canal.

Vessels under 75 tons register	5s. 0d. up or down.
Vessels 75 and under 100 tons register... ..	7s. 6d. „

Register Tonnage.	Draft of Water.	Charge.	Register Tonnage.	Draft of Water.	Charge.
	ft. in.	s. d.		ft. in.	s. d.
100 ...	11 0	10 0	375 ...	13 9	21 0
125 ...	11 3	11 0	400 ...	14 0	22 0
150 ...	11 6	12 0	425 ...	14 3	23 0
175 ...	11 9	13 0	450 ...	14 6	24 0
200 ...	12 0	14 0	475 ...	14 9	25 0
225 ...	12 3	15 0	500 ..	15 0	26 0
250 ...	12 6	16 0	525 ...	15 3	27 0
275 ...	12 9	17 0	550 ...	15 6	28 0
300 ...	13 0	18 0	575 ...	15 9	29 0
325 ...	13 3	19 0	600 ...	16 0	30 0
350 ...	13 6	20 0			

And 6d. additional for every three inches draft of water above.

Channel and River Pilotage.

LIMIT.—The Bristol Channel eastward of Lundy Island, including the River Severn to the City of Gloucester and the River Wye to Chepstow Bridge.

Every licensed pilot employed in piloting vessels to or from the port of Gloucester shall be paid the following Pilotage rates, according to the register tonnage of the vessel :—

r.

Gloucester and Berkeley Canal, continued.

			To or from Lundy and								
			Holmes or Cardiff Roads.			Kingroad.			Sharpness.		
			£	s.	d.	£	s.	d.	£	s.	d.
Under 100 tons			1	10	0	2	0	0	4	0	0
100 tons and under 200			2	0	0	2	10	0	5	0	0
200	"	300	2	7	6	3	0	0	6	0	0
300	"	400	2	15	0	3	10	0	7	0	0
400	"	500	3	5	0	4	2	6	8	5	0
500	"	600	3	15	0	4	15	0	9	10	0
600	"	800	4	5	0	5	7	6	10	15	0
800	"	1000	5	0	0	6	5	0	12	10	0
1000 tons and upwards			5	15	0	7	5	0	14	10	0

			To or from Nash Point or Minehead and Holmes or Cardiff Roads.								
			£	s.	d.	£	s.	d.	£	s.	d.
Under 100 tons			1	0	0	1	10	0	3	10	0
100 tons and under 200			1	5	0	1	15	0	4	5	0
200	"	300	1	10	0	2	2	6	5	2	6
300	"	400	1	15	0	2	10	0	6	0	0
400	"	500	2	2	6	3	0	0	7	2	6
500	"	600	2	10	0	3	10	0	8	5	0
600	"	800	2	17	6	4	0	0	9	7	6
800	"	1000	3	7	6	4	12	6	10	17	6
1000 tons and upwards			3	17	6	5	7	6	12	12	6

			To or from Holmes or Cardiff Roads and Kingroad.						Sharpness.		
			£	s.	d.	£	s.	d.	£	s.	d.
Under 100 tons			0	10	0				2	10	0
100 tons and under 200			0	12	6				3	2	6
200	"	300	0	15	0				3	15	0
300	"	400	0	17	6				4	7	6
400	"	500	1	2	6				5	5	0
500	"	600	1	7	6				6	2	6
600	"	800	1	12	6				7	0	0
800	"	1000	1	17	6				8	2	6
1000 tons and upwards			2	2	6				9	7	6

To or from Kingroad or Sharpness:—											
			£	s.	d.				£	s.	d.
Under 40 tons			0	15	0	300 tons and under 400			3	10	0
40 tons and under 60			1	1	0	400	"	500	4	2	6
60	"	80	1	11	6	500	"	600	4	15	0
80	"	100	2	0	0	600	"	800	5	7	6
100	"	200	2	10	0	800	"	1000	6	5	0
200	"	300	3	0	0	1000 tons and upwards			7	5	0

Gloucester and Berkeley Canal, continued.

Pilots taken on board any vessel inward bound to the westward of Ilfracombe shall be paid the same pilotage rates as from Lundy Island; if between the Nash Point and Ilfracombe, the same rates as from the Nash Point; if between the Nash Point and the Holmes, the same rates as from the Nash Point; and if between the Holmes and Kingroad, the same rates as from the Holmes.

Pilots discharged from any vessel on the outward voyage between any of the stages mentioned in the above scale of rates, shall be paid the same pilotage rates as if they had been taken to the next stage beyond the place where they were discharged.

All vessels Piloted to Chepstow or to Lydney shall pay the same Pilotage Rates as to Sharpness, and vice versa, with the exception of Coal-laden vessels coastwise to and from Lydney, under 200 tons register, for which a special scale of charges, at a reduced rate, is provided by the 4th Pilotage Bye-Law.

Vessels piloted from Sharpness to Lydney, or from Lydney to Sharpness, and then to Kingroad, shall pay the same rates as between Sharpness and Kingroad.

Vessels piloted to and from any place in the River Severn above Sharpness, shall pay one-fourth more than the rates between Sharpness and Kingroad.

All light vessels between Kingroad and Sharpness, or any intermediate point, shall be entitled to one-fifth reduction on the full pilotage charges for that portion of the district; and all vessels propelled or towed wholly by steam power, between Kingroad and Sharpness, or any intermediate point, shall be entitled to a further reduction of one-fourth of the full pilotage charges for that portion of the district.

Vessels taking a Pilot from Kingroad to any place on the River Severn must employ assistants to the Pilot, whose number and payment are regulated by the 6th Pilotage Bye-Law.

Vessels retaining a Pilot on board after he has discharged the duties for which he was engaged, or whilst waiting for water up the River Severn, or whilst delayed by contrary winds when outward bound, and vessels in charge of a Pilot, compelled to bear up and return from the westward from stress of weather or accident, must compensate him according to the regulations contained in the 7th, 8th, and 9th Pilotage Bye-Laws.

In addition to the foregoing charges, a Collector's Fee, varying according to the size of the vessel, from 6d. to 2s. 6d., is payable under the 10th Pilotage Bye-Law.

HAVERFORDWEST.

Keelage and Wharfage.—One penny per ton registered tonnage.

ILFRACOMBE.**Keelage.**

For every ship or vessel driven in by stress of weather, &c.

Coasters belonging to the port 0s. 6d.

„ not belonging to the port 1s. 6d.

Vessels going to or coming from any of Her Majesty's Plantations in Asia, Africa, or America, 2s. 6d.

Also, for every vessel paying Keelage, the additional sum of 6d. for each Top borne by such vessel.

Lighthouse.

For every vessel belonging to the port 0s. 6d.

For every vessel not belonging to the port ... 1s. 0d.

The light is kept up from the first day of September to the last day of April in every year.

Mooring Chains and Buoys.

Smacks, 1s. Two-mast vessels, 2s. Foreign-going, 1s. extra.

When the light is out, 6d. each less for vessels belonging to the Harbour, and 1s. each less for vessels not belonging to the Harbour.

Pilot Skiffs 1s., Pilot Yawls and other sailing boats 8d. each time of entering the Harbour.

LLANELLY.**Pilotage.**

LIMIT No. 1.—If a Pilot be taken on board as far to the westward as to bring Rhossilly Church open to the westward of the Holmes, he is to be paid for every foot of water the vessel may draw.

LIMIT No. 2.—If taken on board within No. 1, but to the westward of No. 4 buoy for Pembrey, or No. 6 for Llanelly.

		Limit No. 1.		Limit No. 2.		Outwards.	
		s.	d.	s.	d.	s.	d.
Under 50 tons register	.....	1	9	...	1 0	...	0 6
From 50 to 75	„	2	0	...	1 3	...	0 9
75 to 100	„	2	3	...	1 6	...	1 0
100 to 125	„	2	6	...	1 9	...	1 3
125 to 150	„	2	9	...	2 0	...	1 6
150 to 175	„	3	0	...	2 3	...	1 9
175 to 200	„	3	3	...	2 6	...	2 0
200 to 225	„	3	6	...	2 9	...	2 3

And 3d. per foot for every additional 25 tons register.

Pilots taken on board inside buoy No. 6, when bound for Llanelly, or inside No. 4, when bound for Pembrey, to be paid 2s. 6d. each for a hobble.

Llanelly, continued.

Every vessel boarded by a Pilot who may be stationed in the "Ceres" pilot-ship, shall pay as for station No. 1.

If any vessel shall evade being boarded by a Pilot in Limit No. 1, she shall pay for Limit No. 1, although boarded above that limit, beside the penalty for refusing a Pilot.

Each vessel to pay 1s. for the boat.

That when any vessel not exceeding 125 tons register, shall have the assistance of a steam-tug in taking her out to sea, a reduction of ten per cent. shall be made on her outward Pilotage.

That all vessels proceeding above Llanelly shall pay as follows, in addition to the rates inwards and outwards from Llanelly:—

	To or from Penclawdd.			To or from Spitty.			Penclawdd to Spitty.	
	s.	d.		s.	d.		s.	d.
Under 50 tons register...	3	6	...	5	0	...	3	6
From 50 to 100 „	4	6	...	7	0	...	4	6
100 to 150 „	5	6	...	9	0	...	5	6
150 to 200 „	7	0	...	10	6	...	7	0

And 6d. for every additional 25 tons register.

Harbour Pilotage.

Under 50 tons, 2s.; 50 and under 75, 2s. 6d.; 75 and under 100, 3s.
For removing vessels between

	Llanelly and Pembrey.			Pembrey and Burry Port	
	s.	d.		s.	d.
Under 50 tons register	3	6	...	3	6
75 „	4	6	...	4	0
100 „	5	6	...	4	6

And 6d. for every additional 25 tons register.

Vessels sailing from the port and putting back after having discharged their Pilots, to pay half pilotage in and out.

Three shillings and sixpence to be the rate charged for a Bar hobble.

Ballast Rates.

Every vessel shall pay for every ton discharged 5½d.
For every man otherwise employed ¾d. per ton.

Buoyage Dues.

For every ship or other vessel entering into the Rivers Burry, Loughor, and Lliedi, or either of them, from and over the Bar of Burry, 1d. per ton register, and ¼d. per ton for Light Dues.

*Llanelly, continued.***Dock Dues.**

Llanelly or New Dock 2d. per ton register.

Copper Works' Dock 1d. „

Carmarthenshire Dock, 1d. per ton register for vessels entering or using the Dock; and 1d. per ton the first week, and a farthing per ton every week after, if for repairs or lying up.

LYDNEY.**Tonnage Rates.**

	s.	d.		s.	d.
1 to 10 tons burthen ...	1	0	45 to 50 tons burthen ...	4	6
11 to 20 „ ...	2	0	51 to 80 „ ...	5	0
21 to 30 „ ...	3	0	81 to 100 „ ...	6	0
31 to 44 „ ...	4	0	101 tons and upwards	7	6

Pilotage.—The same as at Gloucester.

MILFORD.**DEFINITION OF LIMITS.**

From Caldy Island along the coast to St. David's Head and from thence to Cardigan Island, and *vice versa*; and to and from, and into and out of, all ports and places within these Limits.

Pilotage Rates.

	Under 12ft. per foot. £ s. d.			14ft. & Up. per foot. £ s. d.		
From a line drawn from St. Ann's Point to Sheep's Island to any part of the Harbour below a line drawn from Newton Noyse Point to Martin's Haven.....	0	2	6	0	3	6
From a line drawn from St. Ann's Point to Sheep's Island, or from Habberstone Road to any place above a line drawn from Newton Noyse Point to Martin's Haven in addition.....	0	2	0	0	2	6

Vessels inward-bound not boarded until they have passed a line drawn from Rat Island to Watwick Point, are to pay one-fourth less than the foregoing rates; and if not boarded until they have passed a line drawn from Thorne Island to Great Castle Head, they are to pay one-half only of the said rates; and if not boarded until they have passed the Stack Rock to a line from Newton Noyse Point to Martin's Haven, they are not to be chargeable with any Pilotage, unless the Masters thereof require Pilotage assistance.

*Milford, continued.***Additional Rates.***For Ships boarded without the entrance of the Harbour.*

	£	s.	d.
From a line drawn from Leuny Point to Skokham Island			
in addition, per foot	0	2	0
If to the southward of St. Gowan's Head, ditto	0	1	0
Or from Caldy Island eastward, or from the westward of the Grassholm, or three leagues without Leuny Point in addition to the Harbour Pilotage.	3	3	0
Six leagues, ditto	4	4	0
Ten leagues, ditto	6	6	0

Ships not having British registers are to pay one-fourth more than ships having British registers, except when such first-mentioned ships shall, by an order of Her Majesty's Most Honourable Privy Council, be privileged to enter the ports of this kingdom upon paying the same duties of tonnage as are paid by British ships; in which case such ships and vessels, not having British registers, shall pay the like rates of Pilotage only as are payable by ships having British registers. The said surplus rate chargeable on unprivileged Foreign vessels is to be paid to the Collector of this Corporation's Light Duties, at the Custom House, Milford.

Port Charges.

	£	s.	d.
Keelage	0	0	4
Making fast to the rings	0	0	6
Quayage and Moorage per ton register	0	0	0½
Foreign vessels, loading or discharging, per ton	0	0	6
Coasting vessels, loading or discharging, per ton	0	0	2
Loading ballast, per ton	0	0	2
Deposit for landing ballast on quay	1	0	0
Ballast lying on the quay, per ton	0	0	0½
Use of beach discharging	0	1	0
Use of beach outfitting, or repairing, per ton register... ..	0	0	1
Vessels lying alongside the quay for any period not exceeding one month, per ton register	0	0	2
And for every succeeding month	0	10	0


NEATH.**Tonnage Rates.**

For every ship or vessel which shall anchor, load, or unload within the said port, or which shall be made fast to any pier or other work within the same, or any part thereof, the sum of 1½d. per ton of the register tonnage of such ship or vessel.

*Neath, continued.***Rates of Pilotage.**

From the outside of Neath Bar into the Port and Harbour of Neath, and *vice versa*.

For the Pilotage of any Vessel.	FIRST STATION. From outside of Neath Bar to the Layer, and to any distance between the Layer and southern end of Abbey Estate, and <i>vice versa</i> .	SECOND STATION. From outside of Neath Bar to any distance lying be- tween the inner termination of the First Station and the Abbey Pill, and <i>vice versa</i> .	THIRD STATION. From outside of Neath Bar to any distance lying be- tween the Abbey Pill and Neath Bridge, and <i>vice versa</i> .
Tons Register.	s. d.	s. d.	s. d.
Under 80	1 3	1 4	1 6
80 & under 100	1 8	1 9	2 0
100 " 125	1 10	2 0	2 3
125 " 150	2 0	2 3	2 6
150 " 175	2 3	2 6	3 0
175 " 200	2 6	2 9	3 3
200 " 225	2 9	3 0	3 6
225 " 250	3 0	3 3	4 0
250 " 300	3 3	3 6	4 3
300 " 350	3 6	4 0	5 0
350 & upwards ...	4 0	4 3	5 6
	Per foot of the Vessel's Draft of Water.	Per foot of the Vessel's Draft of Water.	Per foot of the Vessel's Draft of Water.

 No vessel to pay for less than Seven Feet.

The several Pilotage Rates herein specified are subject to a reduction of one-fourth part in respect of Vessels propelled by Steam and Vessels towed by Steam Vessels; provided that if any such Vessel shall be propelled by Steam, or towed by a Steam Vessel for a part only of the distance for which any such rate may be payable, the reduction of one-fourth shall be made on such part only of the said rate as shall be proportionate to the distance so propelled or towed.

For conducting vessels from one station to another station within the Port:—

	s. d.
Vessels under 100 tons	3 0
" over 100 tons and under 150	4 0
" " 150 " " 200	5 0
" " 250 " "	8 0

Neath, continued.

To or from the Mumbles:— s. d.

Vessels under 250 tons	4	0	extra.
„ over 250 „	7	0	„

Pilot Boats and Hobbler's Fees, 5s., which is included in the rates.

Ships not having British Registers are to pay one-fourth more than ships having British Registers, except when such first-mentioned ships shall, by any Order of Her Majesty's Most Honourable Privy Council, be privileged to enter the ports of this kingdom upon paying the same duties of tonnage as are paid by British ships, in which case such ships and vessels not having British Registers shall pay the like rates of pilotage only as are payable by ships having British Registers.

Pilot leading the way (if required by the master of the vessel following) entitled to half-pilotage as far as he shall lead.

Rates to Hobblers. s. d.

Hobbler over the Bar, to or from the Layer or Giant's Grave, or the southern end of the Abbey Estate...	2	6	per vessel.
Hobbler over the Bar, to or from Fox's Coal Bank, or the Copper Works, or the Abbey Pill	3	0	„
Hobbler over the Bar, to or from Melincrythan Wharf or Neath Bridge	4	0	„
Hobbler employed in removing or assisting vessels within the Harbour	1	6	per tide.

Towage Rates and Regulations.

Per ton register.

INWARDS.		s.	d.
From the Outer Buoy to Layer or Giant's Grave		0	1½
„ „ Abbey Coal or Crown Copper Works		0	1½
„ „ Mines Royal Copper Works		0	2
„ „ Neath		0	2½
From Mumbles Roadstead to Giant's Grave		0	4

OUTWARDS.

From Giant's Grave or the Layer to Sea or Outward Buoy	0	2
„ Abbey Coal or Crown Copper Works to Sea or Outward Buoy.....	0	2½
„ Abbey Pill or Mines Royal Copper Works to Sea or Outward Buoy.....	0	2½
„ Neath to Sea or Outward Buoy.....	0	2½
From Giant's Grave to Mumbles Roadstead	0	5

Vessels that may require to be towed shorter distances, if not having been offered the steamer to tow them the whole distance from where they were laden or going to load, to pay as under:—

M

Neath, continued.

	s.	d.
From the Layer to Giant's Grave, and <i>vice versa</i>	0	0½
" Abbey Coal or Crown Copper Works	0	1
" Abbey Pill or Mines Royal Copper Works	0	1½
" Neath	0	1½
From Giant's Grave to Abbey Coal or Crown Copper Works	0	0½
" Abbey Pill or Mines Royal Copper Works	0	1
" Neath	0	1½
From Abbey Coal or Crown Copper Works to the Pill	0	0½
" Neath	0	1
Light Vessels towed from Swansea or Port Talbot to Giant's Grave	0	2
Light Vessels towed to Abbey Coal or Crown Copper Works, when done in one tide	0	2½
Light Vessels towed from Neath Harbour to Swansea or Port Talbot	0	6
Loaded Vessels towed to Swansea or Port Talbot (in addition to the rate of towage from the various stations to the Outward Buoy)	0	3
Vessels from 150 tons register and upwards, for towage in or out, to or from Giant's Grave	0	2
All vessels not exceeding thirty tons register to pay 3s. 6d. for towage in or out, to or from Giant's Grave.		
Three shillings the lowest rate for any towage.		
Vessels of 150 tons register and upwards one half-penny per ton above these rates for all inward towage.		

NEWPORT.**Tonnage Rates.**

Coastwise, ½d. per ton register. Foreign, ½d. per ton register.

Keelage.

One penny per ton taken on discharged, at the Wharves in the River.

Tonnage Rates—Docks.

	s.	d.
INWARDS. —For every ship or other vessel which shall enter the said dock from any part of Great Britain, Ireland, the Isle of Man, or any part of the Islands of Guernsey, Jersey, Alderney, and Sark, per ton measurement		
For every other part of Europe, except places within the Straits of Gibraltar, and round the North Cape, per ton measurement	0	2
From any port or place in Europe round the North Cape, or any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa, per ton measurement	0	5
From any port or place in British America, any port or place in the United States of America, or any port or place in any other part of the world, per ton measurement	0	7
	0	10

Newport, continued.

	s.	d.
For every ship or other vessel, with a cargo, which shall enter the said dock and depart therefrom within three weeks from the day of entry without breaking bulk, or which shall discharge and afterwards take on board, and depart with the same cargo, within such period of 3 weeks, per ton measurement (exclusive of the dues under the name of "Rent," hereinafter mentioned)	0	6
For every ship or other vessel which shall have departed from the said dock with a cargo, or any part of such cargo laden therein, and shall re-enter the said dock with the same cargo, or part of such cargo, per ton measurement (exclusive of the dues under the name of "Rent," hereinafter mentioned)	0	3
OUTWARDS.—For every ship or other vessel which shall depart from the said dock to any part of Great Britain, Ireland, the Isle of Man, or any of the Islands of Guernsey, Jersey, Alderney, and Sark, per ton measurement	0	2
To any other part of Europe, except places within the Straits of Gibraltar, and round the North Cape, per ton measurement	0	5
To any port or place in Europe, round the North Cape, or any port or place within the Straits of Gibraltar, whether in Europe, Asia, or Africa, per ton measurement	0	7
To any port or place in British America, any port or place in the United States of America, or any port or place in any other part of the world, per ton measurement	0	10
For every ship or other vessel which shall enter the said dock in ballast, or light, and depart therefrom in ballast, or light, per ton measurement (exclusive of the dues under the name of "Rent," hereinafter mentioned)	0	3

Police and Watchmen.

For all vessels entering or departing from the dock, at per week, or fractional part of a week	1	0
N.B.—Competent watchmen for the protection of vessels and property therein can be obtained on application at the dock-office; the charge for each watchman is per night	3	6

Rent Charges.

All ships and vessels entering the dock in ballast, and departing with cargoes, not exceeding 400 tons register measurement, to be allowed to remain at the rates before specified for a period of	2	weeks
Above 400 tons and not exceeding 700 tons register measurement	3	"
Above 700 tons register measurement	4	"

Newport, continued.

Vessels above 70 tons, and not exceeding 700 tons register measurement, entering with a cargo and going out with another	4 weeks.
Vessels above 700 tons register measurement entering with a cargo and going out with another	5 ..
Vessels above 70 tons register measurement entering with a cargo and going out without breaking bulk, or which shall discharge and afterwards take on board and depart with the same cargo	3 ..
Vessels under 70 tons register measurement entering the dock without ballast	4 days. a. d.

All ships and vessels which shall remain in the dock for any longer periods than those respectively above stated, shall be subject (in addition to the rates and dues before stated) to a rent-charge of, for the first week, or any portion of a week, per ton register measurement.. .. .	0 0½
For the second week, or any portion of a week, per ton register measurement	0 1
For the third week, or any portion of a week, per ton register measurement	0 1½
For the fourth week, and every subsequent week, and for any portion of a week, per ton measurement	0 2
N.B.—In estimating the dues contained in the foregoing schedule, every vessel of less than 20 tons register measurement shall be rated at 20 tons register measurement.	

Use of Machinery for Shipping or Unshipping.

For every ton of coal	0 1½
For every ton of coke, culm, iron, cinders, iron ore, earth, or rubbish, of any kind	0 2½
For every ton of metallic (not iron) ore.. .. .	0 3
Whenever waggons containing any of the above articles are moved on the railway sidings by hydraulic power in connection with the shipping machines, a charge will be made at the rate per ton of	0 1
All articles, matters, or things, not included in the above-mentioned, and excepting ballast, will be subject to special agreement and charges.	
Persons (other than the crews of vessels in the dock) landing or embarking on the Dock Company's premises, will be subject to a charge per head of	0 1

Charges for Discharging and Removing Ballast.

For every ton of ballast that is in the hold within 15 feet abaft, and 15 feet before any hatchway	1 0
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Newport, continued.

For every ton of ballast exceeding in the hold a greater dis- s. d.
tance than stated above, an additional sum of 0 2
An additional charge for working by night will be made at the
rate of per ton 0 3

Rates of Pilotage.

The Limit of this Pilotage is that portion of the Bristol Channel which lies eastward of Lundy Island, up to, and includes Kingroad and the River Usk as far as the Caerleon Bridge. This Pilotage is not compulsory, but may be obtained over all or any portion of this district, at the discretion of the masters of vessels.

Every licensed Pilot employed in piloting vessels to or from the port of Newport shall be paid the following Pilotage Rates, according to the registered tonnage of the vessel:—

FOR LADEN VESSELS.

		Newport to Mouth of River Usk.			Newport to the Holmes or Cardiff Roads.		
		£	s.	d.	£	s.	d.
If under 100 tons	.....	0	10	0	..	0	13 0
100 tons and under 200	....	0	15	0	..	1	0 0
200	..	300	....	0 17 6	..	1	10 0
300	..	400	....	1 2 6	..	1	15 0
400	..	500	....	1 5 0	..	2	1 0
500	..	600	....	1 6 0	..	2	3 0
600	..	800	....	1 8 0	..	2	8 0
800	..	1000	....	1 10 0	..	2	12 0
1000 tons and upwards	.....	1	12	0	..	2	16 0

For all vessels actually engaged in the coasting trade of the United Kingdom, and vessels in ballast, the charges to be one-third less than the above.

FOR LADEN AND UNLADEN VESSELS.

		Limit No. 1.			Limit No. 2.			Limit No. 3.		
		£	s.	d.	£	s.	d.	£	s.	d.
If under 100 tons	....	1	0	6	1	10	6	1	18	0
100 tons and under 200	....	1	10	0	2	5	0	2	12	6
200	..	300	....	2 5 0	3	5	0	4	0	0
300	..	400	....	2 12 6	3	12	6	4	12	6
400	..	500	....	3 1 0	4	3	6	5	6	0
500	..	600	....	3 5 6	4	10	6	5	18	0
600	..	800	....	3 13 0	5	3	0	6	13	0
800	..	1000	....	4 2 0	5	17	0	7	17	0
1000 tons and upwards	.....	4	11	0	6	11	0	8	16	0

LIMIT No. 1.—Between the Holmes or Cardiff Roads and Minehead, or Kingroad, or any point east of Minehead and west of Kingroad.

LIMIT No. 2.—Between the Holmes or Cardiff Roads and Coombe, or any point west of Minehead or Nash Point, and east of Coombe.

LIMIT No. 3.—Between the Holmes or Cardiff Roads and Lundy Island, or any point west of Coombe.

Newport, continued.

Any Pilot who may be required to remain on board any ship or vessel for the convenience of the captain, owner, or agent, after he shall have discharged the duties for which he was engaged, shall be entitled to be paid ten shillings per day for every day he may be employed; and any Pilot who may be required to move any ship or vessel in the dock, harbour, or river, occupying only one tide, shall be entitled to be paid for every ship.

	s.	d.
Under 100 tons	4	0
100 and under 300	5	0
300 „ 500	7	6
500 „ 800	10	0
800 and upwards	12	6

Vessels wind-bound in the waters of the Newport District, and retaining the services of a Pilot, shall pay five shillings per diem.

Pilots taken on board of any vessel inward bound to the westward of Ilfracombe, shall be paid the same Pilotage rates as from Lundy Island; but if west of Nash Point or Minehead, and east of Ilfracombe, the same rates as from the Nash Point; if between the Nash Point and the Holmes, the same rates as from the Nash Point; and if between the Holmes and Kingroad, the same rates as from the Holmes.

In case any vessel shall be compelled to bear up and return from the westward from stress of weather or accident, the Pilot in charge shall be entitled to, and shall be paid one-third of the Pilotage charge in addition, according to the distance such ship or vessel may have reached before she shall have put back.

Every master, owner, or agent of any vessel employing a Pilot, shall, in addition to the foregoing charges, pay a clerk or collector's fee, as follows, viz:—

	s.	d.
Vessels under 100 tons	0	6
100 and under 300	1	0
300 „ 500	1	6
500 „ 800	2	0
800 and upwards	2	6

PENNARD.

Keelage, 4d. per ton register.

PORTHCOWL.

The principal entrance channel to Porthcawl from the Bristol Channel is $2\frac{1}{2}$ miles wide, between the Scarweather and Nash Sands.

Width of entrance to half-tide basin 62 feet.

„ to New Dock..... 55 „

Porthcawl, continued.

Depth of water on sill of half-tide basin :—Neaps, 16 feet; Springs, 27 feet.

Depth of water in half-tide basin when gates are closed, 16 feet.

Depth of water on sill of new or inner dock—Neaps, 18 feet; Springs, 29 feet.

Depth of water in entrance, 2 feet more than Swansea, and the time of high water 12 minutes later.

S.W. and S. winds add to height of the tides, while N. and E. winds cut them off.

Harbour Dues.

Coastwise, 2d. per register ton.

Foreign, 4d. per register ton.

Ballast Rates.

Vessels under	100 tons register	6d. per ton.
100 tons and under	200 "	6½d. "
200 "	300 "	7d. "
300 "	400 "	8d. "
400 tons and upwards	.....	9d. "

Pilotage.

		£	s.	d.
Per registry under 30 tons	.....	0	4	0
30 and under 40 "	.....	0	5	0
40 " 50 "	.....	0	6	6
50 " 60 "	.....	0	8	6
60 " 75 "	.....	0	10	0
75 " 100 "	.....	0	12	0
100 " 125 "	.....	0	15	0
125 " 150 "	.....	0	18	0
150 " 175 "	.....	1	2	0
175 " 200 "	.....	1	5	0
200 " 225 "	.....	1	10	0
225 " 250 "	.....	1	14	0
250 " 500 "	.....	2	0	0
500 and upwards	.....	2	10	0
Steamers under 250 tons register	.....	0	15	0
250 and under 500	.....	1	0	0
Over 500 tons	.....	1	13	0

And for use of Pilot Boat, every ship using same:—

	s.	d.
Per registry under 75 tons	1	0
75 tons and upwards	2	0

*Porthcawl, continued.***Steam Tug.**

				Clear of East Scarweather, or West Nash Buoys.			Clear of Break- water.		
				£	s.	d.	£	s.	d.
20 tons register and under	.....			0	3	0	0	2	0
20	"	"	30 Tons ..	0	4	0	0	2	8
30	"	"	40 " ..	0	5	0	0	3	4
40	"	"	50 " ..	0	6	0	0	4	0
50	"	"	60 " ..	0	8	0	0	5	4
60	"	"	70 " ..	0	9	0	0	6	0
70	"	"	80 " ..	0	10	6	0	7	0
80	"	"	90 " ..	0	13	0	0	8	8
90	"	"	100 " ..	0	15	0	0	10	0
100	"	"	120 " ..	0	17	0	0	11	4
120	"	"	150 " ..	1	1	0	0	14	0
150	"	"	200 " ..	1	5	0	0	16	8
200	"	"	250 " ..	1	10	0	1	0	0
250	"	"	300 " ..	2	0	0	1	6	8
300	"	"	400 " ..	2	10	0	1	13	4
400	"	"	500 " ..	3	10	0	2	6	8
500	"	"	600 " ..	4	10	0	3	0	0
For every additional 50				0	4	0	0	2	8

For use of Company's Tow Rope—

				Sands.		Breakwater.	
				s.	d.	s.	d.
Vessels under 50 tons register	.....			2	3	1	6
" of 50 tons and under 100 tons	..			3	0	2	0
" 100	"	200	" ..	4	6	3	0
" 200	"	300	" ..	6	0	4	0
" 300 tons and upwards	.....			7	6	5	0

Wharfage Rates.

s. d.

On all goods which are usually computed by weight placed upon the wharfs, per ton or fractional part of a ton	..	0	0½
On all goods placed upon the wharfs which are usually computed by measure, per ton of 40 cubic feet or fractional part thereof	..	0	1
For all goods which are usually computed by the Imperial bushel placed upon the wharfs, for every 80 bushels or fractional part thereof	..	0	1
For these payments goods may remain on the wharfs for 48 hours, and in case that time be exceeded the dues shall be doubled for every day that time shall be exceeded.			

*Porthcawl, continued.***Crannage Rates.**

			s.	d.
For all goods or packages not exceeding one ton			0	2
Exceeding 1 ton and not exceeding 2 tons			0	3
" 2	"	3 "	0	5
" 3	"	4 "	0	7
" 4	"	5 "	0	9
" 5	"	6 "	0	11
" 6	"	7 "	1	1
" 7	"	8 "	1	3
" 8	"	9 "	1	6
" 9	"	10 "	1	9
" 10 Tons			2	6

Use of Steam Crane, 4d. per ton on quantity.

Additional Charges.

			s.	d.
COAL—Loading into vessel			0	2 per ton.
IRON ORE—Ditto from vessel to truck			0	4 "
LOAM AND SAND—Ditto ditto			0	5 "
BAR AND RAILWAY IRON—Ditto truck to deck			0	6 "
PITWOOD—From stage to truck			0	6 "
FENCING " "			0	6 "
BRICKS " "			0	10 "
SLATES " "			0	10 "
GRAIN AND FLOUR " "			1	1 "
POTATOES " "			1	1 "
MANURE " "			1	1 "
GUNPOWDER " "			2	8 "
HAY " "			3	0 "
SHOP GOODS " "			4	0 "

For the use of a stage for loading or unloading, or otherwise, 1s. per cargo of any quantity, and for the use of each plank for loading, unloading, or otherwise, 6d.

Note.—The word "Wharf" shall signify any portion of the premises of the company, extending from the Breakwater in the Bay of Porthcawl to the southern end of the railway tunnel leading to the said port.

Water—1s. 6d. for the first 100 gallons, and 1s. for every additional 100 gallons.

PORT TALBOT.**Tonnage Rates.**

For every vessel laden..... 3d. per ton register.
 For every vessel in ballast .. 2d. "

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*Port Talbot, continued.***Pilotage.**

		From Outer Buoy to destination, if in one tide of 3 hrs.			To Outer Buoy from berths, if in one tide of 3 hrs.		
		£	s.	d.	£	s.	d.
Above 25 tons register and under 40	..	0	5	0	..	0	4 0
40	..	0	6	0	..	0	5 0
50	..	0	7	0	..	0	6 0
60	..	0	8	0	..	0	6 10
70	..	0	9	0	..	0	7 8
80	..	0	10	0	..	0	8 6
90	..	0	12	0	..	0	9 10
100	..	0	14	0	..	0	11 6
120	..	0	16	0	..	0	13 2
140	..	0	18	0	..	0	14 10
160	..	1	0	0	..	0	16 6
180	..	1	5	0	..	1	0 0
200	..	1	10	0	..	1	3 6
250	..	2	0	0	..	1	10 4
300	..	2	15	0	..	2	0 8
350	..	3	10	0	..	2	11 4
And for every additional 50 tons	.....	0	5	0	..	0	4 0

If inside the outer buoy only one-half of the foregoing rates.

For transporting a vessel from one part of the harbour to another ;
under 100 tons, 2s. 6d.; above 100 tons, 5s.

The price paid to hobbler not to exceed 2s. for each hobble; and
no hobble shall charge two hobbles unless occupied for more than
three successive hours.

For every hobble engaged by the master, 1s. 6d. from sea into the
dock, and 2s. from sea to the wharf of her destination; if required to
tow, 6d. additional to each hobble; if engaged only to the end of the
breakwater, half the above rates only to be charged.

Steam Tugs.*To or from the Outer Buoy.*

Register Tonnage.	£	s.	d.	Register Tonnage.	£	s.	d.
20 tons and under	..	0	3 0	100 and under 120	..	0	17 0
20 and under 30	..	0	4 0	120	..	1	1 0
30	..	0	5 0	150	..	1	5 0
40	..	0	6 0	200	..	1	10 0
50	..	0	8 0	250	..	2	0 0
60	..	0	9 0	300	..	2	10 0
70	..	0	10 6	400	..	3	10 0
80	..	0	13 0	500	..	4	10 0
90	..	0	15 0	600	..	4	10 0
				every additional 50 tons	0	5	0

Stemming Fee, 1s.

Port Talbot, continued.

For use of Harbour Company's Tow Rope :—	s.	d.
Vessels under 50 tons register burthen.....	1	6
„ of 50 tons and under 100	2	0
„ 100 „ 200	3	0
„ 200 „ 300	4	0
„ 300 tons and upwards	5	0

Ballast.

Ballast, in the river, is free of charge; in the dock, 3d. per ton.

For use of planks and barrows, for 10 tons and under, 2s.; 10 tons and under 20, 3s. 6d.; and 1s. extra for every 10 tons additional.

For use of the Graving-bank :—on the hard, 1d. per ton register per week; on the blocks, 1½d. per ton register per week.

SAUNDERSFOOT.

Pilotage.—For every 100 tons in and out, 10s. (not compulsory.)

Harbour Dues.—2d. per ton register.

Pier Light and Signal.

Each Vessel.	s.	d.	Each Vessel.	s.	d.
20 to 30 tons register....	0	3	70 to 100 tons register..	1	0
30 to 50 „	0	6	100 to 150 „ ..	1	6
50 to 70 „	0	9	150 tons and upwards ..	2	0

Discharging Ballast.

	For quantity on board.
For each man employed on board....	1d. per ton register.
For wheeling	1d. „

Trimming.—2d. per ton.

SWANSEA.**Tonnage Rates**

Authorised to be levied by the Swansea Harbour Trustees, under "The Swansea Harbour Act, 1854," in respect of all Vessels (other than Vessels entering in Ballast) of the burden of Ten Tons and upwards, entering or leaving Swansea Harbour.

For every vessel bound from and to any port or place in the United Kingdom, or the Isle of Man,	s.	d.
under 150 tons.....	per ton	0 4
150 tons and under 250 tons	per ton	0 5½
250 tons and under 350 tons	per ton	0 7
350 tons and upwards.....	per ton	0 8½
For every vessel bound to or from any port or place in Europe, or any port or place within the Straits of Gibraltar, under 100 tons	per ton	0 4
100 tons and under 250 tons	per ton	0 6
250 tons and under 350 tons	per ton	0 7½
350 tons and upwards.....	per ton	0 9

Swansea, continued.

For every vessel bound to or from any other port or

place than above specified, under 150 tons	per ton	0	7½
150 tons and under 250 tons	per ton	0	9½
250 tons and under 350 tons	per ton	1	0
350 tons and upwards	per ton	1	3

In respect of any Vessel driven into the Harbour by stress of weather or other sufficient cause, and not loading or unloading within the Harbour any part of the Cargo thereof, or unloading the same for the purpose of repairs to such Vessel, and remaining in the Harbour exceeding four tides, the trustees are empowered to demand One Half of the full tonnage rates above specified.

And in respect of Vessels entering in Ballast, and departing with Cargoes, the following Rates:—

Vessels bound to ports in the United Kingdom, or		s.	d.
the Isle of Man	per ton	0	3
Vessels bound to any port in Europe, or within the			
Straits of Gibraltar, under 100 tons	per ton	0	3
100 tons and under 250 tons	per ton	0	5
250 tons and under 350 tons	per ton	0	6
350 tons and upwards	per ton	0	7
Vessels bound to any other ports, under 150 tons....	per ton	0	6
150 tons and under 250 tons	per ton	0	7
250 tons and under 350 tons	per ton	0	9
350 tons and upwards	per ton	0	11

And in respect of Vessels entering in Ballast, and leaving without Cargoes, the following Rates:—

For every vessel bound from and to any port or		s.	d.
place in the United Kingdom, or the Isle of			
Man	per ton	0	2
For every vessel bound to or from any port or place			
in Europe, or any port or place within the			
Straits of Gibraltar, under 100 tons	per ton	0	2
100 tons and under 250 tons	per ton	0	3
250 tons and under 350 tons	per ton	0	4
350 tons and upwards	per ton	0	4½
For every vessel bound to or from any other port or			
place than above specified, under 150 tons	per ton	0	4
150 tons and under 250 tons	per ton	0	5
250 tons and under 350 tons	per ton	0	6
350 tons and upwards	per ton	0	7½

The Trustees are also authorised to charge, in respect of every Vessel remaining in any of the Docks or Half-tide Basins longer than thirty days, a further rate of One Penny per ton for every week, and so in proportion for any period less than a week beyond thirty days, except Vessels prevented from leaving by embargo or stress of weather.

Swansea, continued.

The above are *the only rates authorised* by the Harbour Trustees to be levied on shipping.

The rates on goods imported into or exported from the harbour, are respectively payable by the consignee or consignor, *and are not payable by the Master.*

Ballast Rates.

Register Tonnage.	Rates per ton on the quantity discharged.			
	s.	d.	s.	d.
Under 100 tons	0	5	at New Cut ..	0 6 in Dock.
100 and under 150 tons	0	7	" ..	0 8 "
150 and under 200 tons	0	9	" ..	0 10 "
200 tons and upwards	0	11	" ..	1 0 "

Additional Charges.

	s.	d.
Discharged from any vessel into another vessel....	0	9 per ton.
Discharged into Lighters	1	6 "
Loaded into any vessel	0	6 "
Loaded into any vessel and discharged therefrom..	1	6 "

Towage.

In or Out, exclusive of Harbour Towages.

	£	s.	d.		£	s.	d.
Under 50 tons	0	7	6	425 and under 450	3	15	0
50 and under 75	0	10	0	450 "	4	0	0
75 "	1	0	0	475 "	4	5	0
100 "	1	5	0	500 "	5	0	0
125 "	1	10	0	525 "	5	10	0
150 "	1	15	0	550 "	5	15	0
175 "	2	0	0	575 "	6	0	0
200 "	2	5	0	600 "	6	5	0
225 "	2	10	0	650 "	7	0	0
250 "	2	15	0	700 "	7	5	0
275 "	3	0	0	750 "	8	0	0
300 "	3	5	0	800 "	8	5	0
325 "	3	10	0	850 "	9	0	0
350 "	3	15	0	900 "	9	5	0
375 "	4	0	0	950 "	10	0	0
400 "	4	5	0				

All vessels above 1000 tons, 2d. per ton, new measurement.

If more than one Tug is required, half the above rates will be charged for each additional Tug.

Cranage.

At Corporation Cranes, Public Quay.

	s.	d.
For every lift under 1 ton	0	3 per lift.
Not exceeding 2 tons	0	3 "
" 2 to 5 tons	0	6 "
Five tons and upwards	2	0 "

*Swansea, continued.***Charges for Use of Cranes,***Belonging to the Harbour Trustees.*

	£	s.	d.		£	s.	d.
Under 1 ton ..	0	0	3	5 and under 6 ..	0	7	6
1 and under 2 ..	0	0	6	6 ..	0	10	0
2 ..	3	0	1	7 ..	0	12	6
3 ..	4	0	3	8 ..	0	15	0
4 ..	5	0	4	9 ..	1	0	0

No lift to exceed ten tons.

Pilotage.

Register Tonnage.	Inwards.	Outwards.	Total.
	£ s. d.	£ s. d.	£ s. d.
Vessels 50 tons and under 75	0 10 0	0 6 0	0 16 0
Vessels 75 tons and under 100	0 11 0	0 7 0	0 18 0
Vessels 100 tons and under 125	0 12 0	0 8 0	1 0 0
Vessels 125 tons and under 150	0 14 0	0 8 0	1 2 0
Vessels 150 tons and under 175	0 17 0	0 8 0	1 5 0
Vessels 175 tons and under 200	0 19 0	0 8 0	1 7 0
Vessels 200 tons and under 250	1 6 0	0 10 0	1 16 0
Vessels 250 tons and under 300	1 12 0	0 12 0	2 4 0
Vessels 300 tons and under 350	2 3 0	0 14 6	2 17 6
Vessels 350 tons and under 400	2 10 0	0 17 0	3 7 0
Vessels 400 tons and under 450	2 17 6	1 2 0	3 19 6
Vessels 450 tons and under 500	3 5 0	1 7 0	4 12 0
Vessels 500 tons and under 550	3 10 0	1 12 0	5 2 0
Vessels 550 tons and under 600	3 15 0	1 17 0	5 12 0
Vessels 600 tons and under 650	4 0 0	2 2 0	6 2 0
Vessels 650 tons and under 700	4 5 0	2 7 0	6 12 0
Vessels 700 tons and under 750	4 10 0	2 12 0	7 2 0
Vessels 750 tons and under 800	4 15 0	2 17 0	7 12 0
Vessels 800 tons and under 850	5 0 0	3 2 0	8 2 0
Vessels 850 tons and under 900	5 5 0	3 7 0	8 12 0
Vessels 900 tons and under 950	5 10 0	3 12 0	9 2 0
Vessels 950 tons and under 1000	5 15 0	3 17 0	9 12 0

Together with an additional sum of 5s. in respect of every 50 tons above 950 tons on the Inward Pilotage; and an additional sum of 5s. in respect of every 50 tons above 950 tons on the Outward Pilotage.

Pilots will take vessels over 500 tons register, Outward Bound, clear of the Green Grounds, or to the Mumbles Roads; and the above charge includes landing the Pilot, in all cases.

Vessels of 200 tons and upwards, if boarded beyond the following bearings, shall pay an additional Pilotage, as follows:—

Swansea, continued.

	W. of Pwllidy Point, bearing N.N.E.		W. of Oxwich Point bearing N.N.E.S. of Sker Buoy, bearing N.N.E. or W.S.W.		W. of Worm's Head, bearing N.N.E.	
	s.	d.	s.	d.	£	s. d.
200 tons and under 300 ..	4	0	5	0	0	6 0
300 tons and under 400 ..	5	6	7	6	0	10 0
400 tons and under 500 ..	7	6	10	0	0	15 0
500 tons and under 600 ..	10	0	12	6	1	0 0
600 tons and under 700 ..	12	6	15	0	1	5 0
700 tons and upwards ..	15	0	18	6	1	10 0

One-half of the above rates only to be paid and payable to every Pilot navigating or assisting any vessel (not entering Swansea Harbour) within any part of Swansea Bay, or within the limits of the Pilotage Ground hereinafter mentioned.

N.B.—Pilotage not compulsory upon vessels under 100 tons register, when entering or leaving Swansea Harbour in ballast; but if any Pilotage be required, only a licensed Pilot to be employed, and the above rates to be paid.

OPTIONAL PILOTAGE.—Masters of vessels under 500 tons register, requiring Pilots to take their vessels to the Mumbles Roads, or clear of the Green Grounds, to pay, in addition to the Outward Pilotage Rates, the following additional Rates, including landing:—

	s.	d.
Vessels under 100 tons	4	0
Vessels 100 tons and under 200	5	6
Vessels 200 tons and under 300	7	6
Vessels 300 tons and under 400	9	6
Vessels 400 tons and under 500	11	0

Masters of vessels requiring Pilots to take their vessels to the Eastern or Western Limits, to pay, in addition to the Outward Rates, the following additional rates, including landing: £ s. d.

Vessels 300 tons and under 500	3	0	0
Vessels 500 tons and under 700	4	0	0
Vessels 700 tons and under 900	5	0	0
Vessels 900 tons and upwards	6	0	0

The following shall be deemed to be the limits of the Pilotage Ground of Pilots appointed and licensed by the Swansea Harbour Trustees, viz.:—"North of the line of the Nash Lights in one;" and "east of an imaginary line running north and south of a point, four miles westward of the Helwick light vessel, placed off the Helwick Shoal, near the Worm's Head, in the county of Glamorgan."

Every Pilot required to remain on board a vessel, whether inward or outward bound, to be paid by the Master of such vessel, at the

Swansea, continued.

rate of 4s. for every twelve hours, or broken portion of twelve hours, in which such Pilot shall not have earned pilotage or distance-money in the same vessel.

Harbour Pilotage.

	s.	d.
Vessels under 10 tons.....	2	6
Vessels 100 tons and under 200.....	3	6
Vessels 200 tons and under 400.....	5	0
Vessels 400 tons and under 500.....	7	6
Vessels 500 tons and upwards	12	0

If the Master of any vessel shall require any Pilot to go on board and take his vessel out of the Harbour, transport or move her, and such vessel be not ready to be taken out or moved, half the rates last mentioned shall be paid to the Pilot.

Masters of vessels requiring hobbler or boats, to assist in removing vessels within the Harbour, shall pay each hobbler employed, 2s., and for each boat, 2s.

TENBY.**Tonnage Rates.**

Vessels discharging	3d. per ton register.
Vessels wind bound.....	1½d. „
Yachts	2d. „ or 6d. per ton yearly.
Trawlers	2d. „ or 40s. yearly.

Pilot Boats exempt.

WATCHET.

Harbour Dues.—One halfpenny per ton registered tonnage.

VALUE IN BRITISH CURRENCY

OF

THE MONEYS OF ALL NATIONS.

AMERICA, U.S.	£	s.	d.
Eagle	2	1	0
Half Eagle	1	0	6
Dollar	0	4	2

AUSTRIA.

Ducat.....	0	9	4
Silver Florin.....	0	2	0
Dollar	0	4	0
Zwanzigr, 20 Kreutzers ...	0	0	8

BELGIUM.

Gold Leopold	0	19	10
— 10 Franc Piece	0	7	10
Silver 5 Franc.....	0	3	11
— 1 Franc.....	0	0	9

BRAZILS.	£	s.	d.
Gold Piece, 6400 Reis	1	15	9
— 4000 —	1	0	0
Silver ditto, 1200 —	0	4	2
— 960 —	0	4	1
— 640 —	0	2	9
— 320 —	0	1	4
— 200 —	0	0	8

BREMEN.

Louis d'or	0	16	0
Gold Rigsbank Dollar	0	3	4
86 Groas Piece	0	4	2

Value of Foreign Moneys, continued.

DENMARK.	£	s.	d.
Christian d'or	0	16	3
Silver Species	0	4	4
Rigsbank Daler	0	2	2
Mark	0	0	4½

EGYPT.	£	s.	d.
Gold New Sequin	0	10	4
Silver New Piastre.....	0	3	4
— Grush	0	1	2

EAST INDIES.	£	s.	d.
Gold Mohur.....	1	9	0
Sicca Rupee.....	0	1	10½

FRANCE.	£	s.	d.
Gold Napoleon	0	16	0
Silver 5-Franc Piece	0	4	0
— Franc	0	0	9½

GERMANY.	£	s.	d.
Gold Louis d'or	0	16	1
— Ducat	0	9	3
Silver Crown	0	4	4
Florin	0	1	8

GREECE.	£	s.	d.
40-Drachmi Gold Piece ...	1	10	6
Five ditto	0	3	9
1 Drachmi, 100 Lepas	0	0	8½

HAMBURG and LUBEC.	£	s.	d.
Ducat.....	0	9	3
Dollar.....	0	4	4
Mark	0	1	2½

HANOVER, BRUNSWICK, &c.	£	s.	d.
Gold George d'or Double... 1	12	4	
Ditto, Single	0	16	2
Thaler, 30 Groschen	0	2	11

HOLLAND.	£	s.	d.
Gold 10-Florin Piece.....	0	16	6
— Ducat	0	9	3
Silver Florin or Guilder ...	0	1	8

MEXICO.	£	s.	d.
Gold Doubloon	3	5	0
— Half ditto	1	12	6
— Quarter ditto	0	16	3
— Sixteenth ditto.....	0	4	0
Silver Dollar	0	4	2
— Half ditto	0	2	1
— Quarter ditto	0	1	0½
— Eighth ditto	0	0	6½

NAPLES.	£	s.	d.
Gold Piece of 30 Ducats ...	5	0	0
Silver Ducat	0	3	4
— Dollar	0	4	0

NORWAY.	£	s.	d.
Spanish Dollar	0	4	4
Rigsbank Dollar	0	2	2
Mark	0	0	9½

POLAND.	£	s.	d.
Gold Ducat	0	9	0
Rix Dollar	0	4	0
Florin.....	0	0	5½

PORTUGAL.	£	s.	d.
Gold Joannose, 1000 Reis ...	1	16	0
Silver Crown, 100 Reis ...	0	4	8
— Crusado 400 Reis ...	0	2	3

PRUSSIA.	£	s.	d.
Gold Frederick	0	16	9
Silver Thaler	0	3	0
Silbergroschen	0	0	1½

ROME.	£	s.	d.
Gold 10-Scudi Piece	2	2	6
Silver Scudo, 10 Paoli	0	4	2
Paoli, 10 Bajochi	0	0	5

RUSSIA.	£	s.	d.
Gold Half Imperial	0	16	3
Ducat.....	0	9	2
Silver Rouble	0	3	2

SAXONY.	£	s.	d.
August d'or	0	16	2
Thaler Specie	0	3	11
— Currency	0	3	0

SPAIN.	£	s.	d.
Gold Doubloon.....	3	6	6
— Pistole	0	16	6
Silver Dollar.....	0	4	3

SWEDEN.	£	s.	d.
Gold Ducat	0	9	2
Silver Species	0	4	4
— Half Species.....	0	2	2
Rix Dollar Banco, 48 Sk....	0	1	8

SWITZERLAND.	£	s.	d.
Gold Double Pistole	1	17	0
Four-Franc Piece	0	4	8
1-Franc do., 10 Batzen.....	0	1	1½

TURKEY.	£	s.	d.
Gold New Double Sequin... 1	16	0	
— Sequin	0	18	0
Spanish Dollar.....	0	4	2
Piastre, 40 Paras.....	0	0	2½

TIDAL CONSTANTS.

By the following Table, the time of High Water may be found in *Local Mean Time*, for any day of the year, by *adding to or subtracting from* the various Ports of reference.

GREAT BRITAIN.

West Coast, &c.			East Coast, &c.		
		H. M.			H. M.
St. Ives	sub.	1 48	Inverness	sub.	1 49
Newquay	sub.	1 28	Aberdeen	sub.	1 7
Padstow	sub.	1 19	Dundee	add	0 25
Boscawen	sub.	1 17	Perth	add	1 28
Budehaven	sub.	0 58	Leith	add	0 10
Lundy Island ..	sub.	1 17	Berwick	add	0 11
Barnstaple Bridge	add	0 41	Blyth	add	1 8
Appledore	add	0 11	Tynemouth Bar ..	add	1 13
Bideford	add	0 20	North Shields ..	add	1 16
Minehead	sub.	1 12	Newcastle	add	2 16
Bridgewater Bar ..	sub.	0 52	Sunderland	add	1 15
Weston-super-Mare	sub.	0 48	Seaham	add	1 17
Flatholm Island ..	sub.	0 48	Hartlepool	add	1 21
Portishead	sub.	0 15	Whitby	add	1 38
Kingroad	sub.	0 35	Scarborough	add	2 4
Chepstow	sub.	0 1	Flamborough Head	add	2 23
Carmarthen Bar ..	sub.	0 22	Great Grimsby ..	add	3 29
Tenby	sub.	0 32	Hull	add	4 19
St. Ann's Lighthouse	sub.	0 36	Goole	add	5 37
Fishguard	add	0 24	Lynn	add	3 53
Cardigan	add	0 29	Yarmouth Road ..	sub.	4 52
Newquay	add	0 53	Lowestoft	sub.	4 10
Aberystwith	add	0 59	Orfordness	sub.	2 52
Aberdovey	add	1 28	Margate	sub.	2 27
Port Madoc	add	0 58	Nore	sub.	1 37
Caernarvon	sub.	2 2	Chatham	sub.	1 6
Holyhead	sub.	1 24	Gravesend	sub.	0 57
Amlwch	sub.	1 5	Woolwich	sub.	0 30
Beaumaris	sub.	1 3	London Docks ..	sub.	0 10
Chester	sub.	1 5			
Fleetwood	sub.	0 23			
Whitehaven	sub.	0 21			
Douglas, I. of Man	sub.	0 23			
Ramsey	sub.	0 23			
Peel	sub.	0 27			
Kircudbright	sub.	0 25			
Ardrossan	add	0 10			
Glasgow	add	1 50			

South Coast

Ramsgate	add	5 12
Deal	add	4 43
Folkestone	add	4 35
Hastings	add	4 21
Beachy Head	add	4 48
Shoreham	add	5 3

Tidal Constants, continued.

		H. M.			H. M.
Arundel Bar ..	add	5 3	Lyme Regis ..	sub.	0 11
Littlehampton ..	add	5 4	Exmouth ..	sub.	0 11
Chichester ..	add	4 58	Torbay ..	sub.	0 32
Bembridge Point	add	4 28	Teignmouth ..	sub.	0 32
Portsmouth ..	add	5 9	Dartmouth ..	sub.	0 16
Southampton ..	add	3 58	Devonport ..	sub.	0 49
West Cowes ..	add	4 18	Plymouth Break.	sub.	0 55
Yarmouth ..	add	3 28	Fowey ..	sub.	1 18
Needles Point ..	add	3 14	Mevagizey ..	sub.	1 28
Christchurch ..	add	2 28	Falmouth ..	sub.	1 35
Poole ..	add	2 38	Lizard ..	sub.	1 32
Portland ..	add	0 29	Penzance ..	sub.	2 2
Bridport ..	sub.	0 27	Scilly I. (St. Mary)	sub.	2 5

IRELAND.

Skull ..	sub.	2 30	Tor Point ..	sub.	1 55
Crookhaven ..	sub.	2 23	Lough Lorne ..	sub.	0 47
Dunmanus Harb.	sub.	2 35	Belfast ..	sub.	0 52
Dunbeacon ..	sub.	2 41	Donaghadee ..	sub.	0 22
Black Ball Harb.	sub.	2 52	Lough Strangford.	sub.	0 42
Castletown ..	sub.	2 18	Warren Point ..	sub.	0 25
Bantry Harbour..	sub.	2 45	Carlingford Bar..	sub.	0 55
West Cove ..	sub.	2 40	Howth Harbour..	sub.	0 26
Valentia Harbour.	sub.	2 50	Dublin Bar ..	sub.	0 23
Kilbaba ..	sub.	2 16	Kingstown ..	sub.	0 25
Kilrush ..	sub.	1 50	Wicklow ..	sub.	1 6
Carrigaholt..	sub.	1 48	Arklow ..	sub.	2 50
Tarbert ..	sub.	1 35	Wexford ..	add	0 49
Foyne's Island ..	sub.	0 57	New Ross ..	sub.	0 28
Mellon ..	sub.	0 31	Waterford(bridge)	sub.	0 26
Limerick ..	sub.	0 16	Do. (Duncan fort)	sub.	1 12
Galway ..	sub.	1 57	Dunmore ..	sub.	1 5
Roundstone ..	sub.	2 4	Ballinacourty, Dun-		
Achillbeg ..	sub.	1 18	garven ..	sub.	1 20
Broadhaven Harb.	sub.	1 32	Youghal ..	sub.	1 18
Westport ..	sub.	1 35	Ballycotton..	sub.	1 38
Sligo Bay ..	sub.	1 14	Cork ..	sub.	1 34
Donegal Harbour.	sub.	1 14	Queenstown ..	sub.	1 31
Killibegs ..	sub.	1 16	Kinsale ..	sub.	1 49
Lough Rossmore.	sub.	1 12	Courtmaeskerry..	sub.	1 56
Sheephaven ..	sub.	1 0	Castletownsend ..	sub.	2 11
Londonderry ..	add	1 29	Baltimore ..	sub.	2 9
Coleraine ..	sub.	0 8	Cape Clear ..	sub.	2 32

Tidal Constants, continued.

FOREIGN AND COLONIAL.

	M.	M.		M.	M.
Adelaide, port, Aus.	sub.	0 48	Ichabo	sub.	5 32
Aden, Arabia ..	add	3 13	Jackson, Port ..	add	1 43
Auckland	add	0 33	Jersey, St. Hellier	sub.	4 7
Bayonne Bar. Fr.	sub.	2 47	Malaga	add	5 28
Bilboa, Spain ..	sub.	3 32	Malo, St.	sub.	0 27
Bombay	add	5 8	Melbourne	sub.	5 12
Bordeaux	add	0 18	Moreton Bay ..	add	2 28
Boston, U.S. ..	add	4 55	Natal, Port	sub.	2 2
Botany Bay	add	1 43	Nelson, New Zea.	add	3 18
Boulogne	add	4 53	New York	add	1 41
Brest	sub.	2 45	Oporto	sub.	4 2
Buenos Ayres ..	add	5 28	Ostend	add	5 53
Cadiz, Spain ..	sub.	4 47	Pernambuco ..	sub.	2 9
Calais	add	5 17	Philadelphia ..	sub.	5 14
Calcutta	sub.	4 2	Philip, Port, ent.	sub.	5 2
Callao Bay	sub.	0 45	Portland, U.S. ..	add	4 53
Canton River, ent.	add	3 28	Quebec	add	0 6
Charlestown, U.S.	add	0 41	Richmond, U.S. ..	sub.	2 4
Cherbourg	add	1 17	Rio Janeiro ..	sub.	3 32
Copiapo	add	1 58	Rochelle	sub.	3 1
Coquimbo	add	2 36	Royal, Port	add	4 28
Delaware, U.S. ..	add	1 28	Rotterdam	sub.	2 47
Dieppe	add	4 34	Rouen	sub.	4 4
Francisco, San ..	add	4 2	Savannah, City ..	add	1 41
Galle, Point de ..	sub.	4 32	Senegal	add	3 58
Gambia River ..	add	1 38	Singapore	add	3 13
Geelong	sub.	3 42	Suez Bay	sub.	4 32
Gibraltar	sub.	4 12	Sydney, Australia	add	2 6
Guernsey, St. Peter	add	0 16	Table Bay	sub.	3 52
Hamburg	sub.	1 3	Tangier	sub.	4 50
Hong Kong	add	3 43	Ushant	sub.	3 0
Horn, Cape	sub.	2 22	Valparaiso	add	3 0

To or from Milford Haven.

To or from Milford Haven.

MOON'S RISING AND SETTING.

At four days old it sets at, and shines till, about 10 at night.
 5 about 11
 6 about 12
 7 at near 1 in the morning.
 14 at full it rises about 6 in the evening.

16 at a quarter after 7
 17 at half after 8
 18 about 10
 19 about 11
 20 about 12

